ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Professional Development and Barriers Among Elementary Teachers in Sofronio Española: A Basis for A Professional Development Plan

John Walter B. Ronquillo
Western Philippines University
johnwalter.ronquillo@deped.gov.ph

Date Submitted:
February 05, 2026

Date Accepted:
March 03, 2026

Date Published:
March 13, 2026

DOI:
10.5281/zenodo.19008263

ABSTRACT

This study investigated the level of awareness of and barriers to professional development (PD) among elementary teachers in the District of Sofronio Española, Palawan. Using a quantitative descriptive-correlational design, data were gathered from 281 public elementary school teachers through an adapted Likert-scale survey questionnaire. The study analyzed teachers' demographic profiles, their awareness of PD programs, and the barriers affecting participation using descriptive statistics and Spearman's rho correlation. Findings revealed that teachers were moderately aware of available PD programs, such as career progression initiatives, special programs, and in-service training. While most teachers recognized the importance of these programs, they reported limited knowledge of their practical and skills-based applications. The most prominent barriers identified were transportation difficulties and heavy workloads, followed by funding constraints, limited internet access, and mismatched training needs of teachers. Correlation analysis showed no consistent significant relationship between teachers' level of awareness of professional development programs and their demographic profile, except for selected indicators related to years of teaching experience. Similarly, the relationship between awareness of professional development and perceived barriers was generally not statistically significant, although internet accessibility demonstrated a strong association with INSET awareness. However, awareness alone did not significantly reduce participation barriers. Based on these findings, the study concludes that while professional development opportunities are available, their effectiveness is constrained by systemic and contextual barriers in rural settings. It recommends localized, flexible, and resource-supported PD initiatives that address logistical and technological constraints. A professional development plan was proposed to guide DepEd and school administrators in improving the access, relevance, and sustainability of PD programs for rural educators.

Keywords: *barriers, professional development, Sofronio Española, teacher awareness*

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

INTRODUCTION

Professional development (PD) has significant implications for improving teachers' skills, particularly among educators in rural locations where access to training is challenging. In many cases, PD programs are criticized for being too general and for failing to address the actual challenges teachers face in the classroom (Schwartz, 2023). A study by Glover et al. (2016) argues that mainstream PD initiatives often fail to address the realities of rural teachers, including issues such as poor transportation, limited internet access, and a lack of institutional support. In addition, rural teachers experience further difficulties in accessing professional development due to financial and administrative constraints, which create a gap between policy intent and implementation (Eroglu & Kaya, 2021; Popova et al., 2022).

According to UNESCO, by 2030, an additional 44 million teachers will be needed to achieve universal education. Teacher shortages are driven by poor working conditions, low salaries, and heavy workloads. In the Philippines, the Department of Education (DepEd) has launched initiatives, such as the National Educators Academy of the Philippines (NEAP) Core Progression Programs, to support teacher growth. However, a 2021 DepEd report indicatesthat these programs are largely ineffective in rural areas due to infrastructure limitations and misalignment with teachers' actual needs. Recent studies support these concerns. Alba and Gamozo (2024) found that while PD programs exist in Palawan, rural teachers often struggle to participate due to transportation and facility issues. Similarly, Peñaflor and Illescas (2023) identified challenges associated with blended learning in rural Palawan, citing limited internet access and teachers' lack of digital skills.

Krille (2020) noted that younger teachers tend to adapt more easily to new methods, while those with advanced education are more likely to pursue further professional development. In addition, awareness of available PD opportunities plays a significant role in participation. The Philippine Professional Standards for Teachers (PPST) support career progression through initiatives such as INSET and special training sessions; however, these programs often fail to address the specific needs of rural teachers.

The existing literature has largely overlooked the unique challenges faced by rural teachers, including heavy workloads, limited funding, and restricted access to professional development programs and resources (Rodríguez, 2021). Research often generalizes teacher experiences without focusing on remote districts such as Sofronio Española. This gap results in insufficient policy attention and limited support mechanisms for teachers in geographically isolated areas.

This study examines the demographic backgrounds of elementary teachers in Sofronio Española, their awareness of professional development programs, and the challenges they experience. Specifically, it aims to identify gaps and propose strategies to increase teacher participation in PD initiatives. Addressing these challenges is essential to ensure quality education and teacher well-being in rural areas. The study seeks to determine whether these issues stem from program design and implementation or from external contextual factors that hinder teacher participation. The primary purpose of this research is to assess the current status of PD programs, identify existing barriers, and develop a professional development plan aligned with community needs. This study will contribute to the design and

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

implementation of context-sensitive PD plans that respond to the realities of elementary teachers in rural settings.

Statement of the Problem

This study aimed to examine the professional development awareness and barriers among elementary teachers through a survey-based approach in the District of Sofronio Española, Division of Palawan.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in the District of Sofronio Española, Division of Palawan, in terms of:
   1.1 age;
   1.2 highest educational attainment; and
   1.3 number of years of teaching experience in rural areas?
2. What is the level of awareness of the current professional development opportunities available to teachers in Sofronio Española in terms of:
   2.1 career progression programs;
   2.2 special programs; and
   2.3 in-service training?
3. What are the barriers preventing elementary teachers from taking advantage of professional development opportunities in terms of:
   3.1 workloads;
   3.2 funding;
   3.3 transportation;
   3.4 teachers' needs; and
   3.5 internet accessibility?
4. Is there a significant relationship between the level of awareness of the current professional development available to elementary school teachers and their demographic profile?
5. Is there a significant relationship between the level of awareness of the current professional development available to elementary school teachers and the barriers preventing them from taking advantage of professional development?
6. Based on the findings, what professional development plan may be proposed?

Hypotheses

There is a partially significant relationship between teachers' level of awareness of the current professional development available for elementary school teachers and their demographic characteristics, with results varying across specific demographic groups.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

There is no significant relationship between the level of awareness of elementary school teachers regarding available professional development opportunities and the barriers that prevent them from taking advantage of these opportunities.

Significance of the Study

The study is significant because it examines the professional prospects and challenges encountered by elementary teachers in the District of Sofronio Española, Palawan.
The findings are expected to benefit the following:

Department of Education (DepEd). This study helps DepEd understand the actual concerns of rural school teachers. The research can guide the improvement of the design, accessibility, and relevance of professional growth activities, especially for schools in rural areas.

School Administrators. School administrators and supervisors may apply the results in designing support mechanisms and schedules that allow teachers to engage in training without experiencing excessive workload or logistical constraints.

Teachers. Teachers benefit from this study as it identifies their needs and challenges. As teachers enhance their instructional skills and confidence, they can implement more effective teaching practices that support clearer instruction and improved classroom engagement. The study also supports the development of more tailored programs suited to teachers' subject areas, teaching contexts, and individual professional development goals.

Policymakers. Local and national policymakers may use the findings to formulate frameworks for professional development programs for elementary teachers, considering geographical limitations, internet accessibility, and funding needs in rural areas.

Learners and the Community. Learners benefit from clearer instruction, more engaging lessons, and stronger academic support, leading to improved understanding, motivation, and academic performance. These improvements also contribute to a more supportive school environment and stronger school–community relationships. Overall, the study highlights that investing in teacher development yields positive outcomes not only for educators but also for students and the wider community.

Future Researchers. This study provides a foundation for future research on professional development in rural areas. It may also serve as a reference for researchers conducting related studies, particularly in the review of related literature on professional development.

Scope and Delimitation

This study was conducted in the District of Sofronio Española, Division of Palawan, as it is a rural district where elementary teachers experience unique challenges in accessing professional development

opportunities. The locale was selected to examine how professional development programs operate in a geographically isolated setting and to identify barriers specific to rural schools.

The study population consisted of 281 public elementary school teachers, ranging from Teacher I to Head Teacher III, in the district. All eligible teachers were included to ensure that the data represented the full range of teaching positions and experiences within the district. Secondary school teachers and private school teachers were excluded, as the study focused solely on the professional development system implemented in public elementary schools.

The study focused on teachers' level of awareness of professional development programs, specifically career progression programs, special programs, and in-service training, as well as the barriers that affect teachers' participation, such as workload, funding, transportation, teachers' needs, and internet accessibility. These variables were selected because they directly relate to the availability and accessibility of professional development in rural school settings.

The study's timeframe was limited to the current school year, during which the data were collected. This period was chosen to ensure that the findings reflected the most recent conditions of professional development programs and the current experiences of teachers in the district.

Conceptual Framework

The ITO (Input–Throughput–Output) model presents the conceptual paradigm used in this study, representing Input, Throughput, and Output.

For the input section, the researcher included variables from the Statement of the Problem (SOP), such as the demographic profile of the respondents in terms of age, highest educational attainment, and number of years of teaching experience in rural areas, as well as the survey questionnaires and validators. These demographic factors were crucial because they influenced teachers' awareness of professional development (PD) opportunities and their perceived barriers. In addition, research instruments were designed to collect quantitative data related to the demographic profile, awareness of PD programs, and teacher barriers. The quality of the input directly affected the reliability and validity of subsequent data analysis.

The demographic data and survey responses served as raw data for the throughput phase, where data processing and analysis took place. Accurate and relevant input ensured that the analysis faithfully reflected the teachers' realities and experiences.

For the throughput section, the researcher identified various barriers that prevented teachers from participating in professional development opportunities, such as workload, funding, transportation, teachers' needs, and internet access. To ensure the reliability and accuracy of the data, the survey instrument underwent validation and pilot testing. Data collection involved gathering responses from teachers in Sofronio Española, followed by data encoding and organization for efficient

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

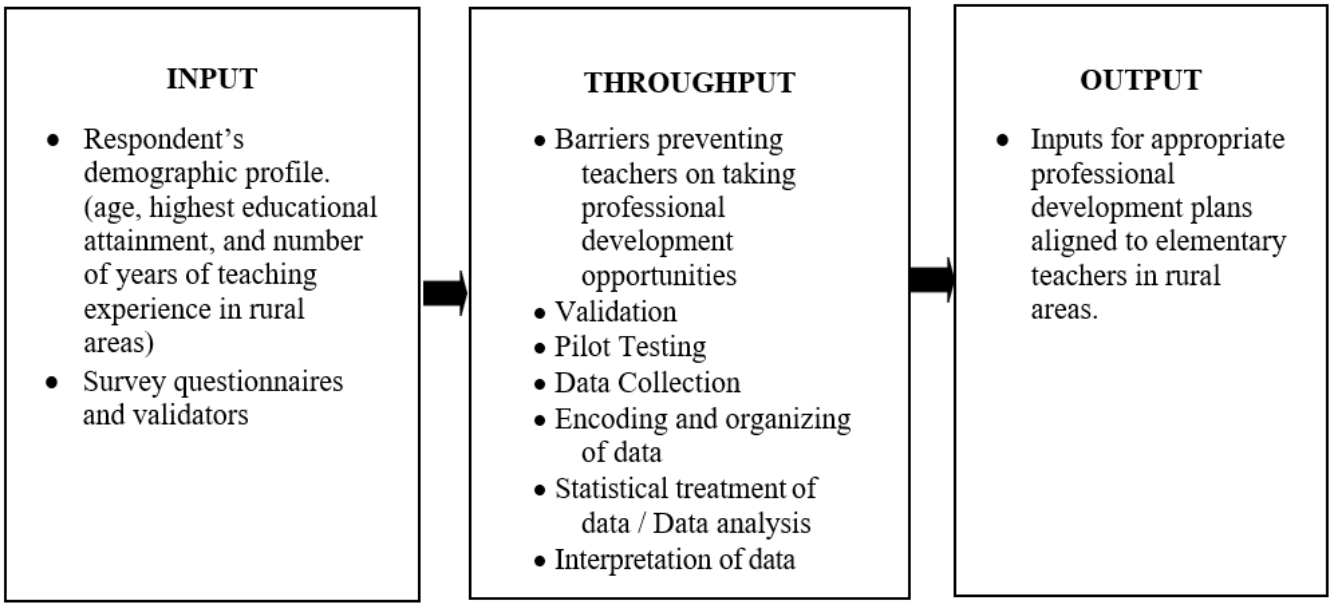
analysis. Spearman's rho correlation was then applied to analyze relationships between demographic factors, awareness levels, and barriers. Finally, the data were interpreted to draw conclusions based on statistical results and observed patterns.

The thorough analysis of input data led to meaningful conclusions that formed the basis of the output. The patterns identified during the throughput phase helped determine which factors most significantly hindered professional development.

Based on the findings, the researcher proposed appropriate professional development plans aligned with the needs of elementary teachers in rural areas. The conclusions drawn from the data analysis guided the development of strategies tailored to the specific needs of elementary teachers in rural settings. These plans aimed to mitigate identified barriers and enhance the accessibility and effectiveness of PD programs.

The quality of the input and the effectiveness of the throughput processes directly influenced the output. Without accurate data collection or proper analysis, the proposed professional development plans might not have adequately addressed the real barriers teachers face. Conversely, well-validated inputs and thorough analysis ensured practical, evidence-based outputs.

Figure 1. **Conceptual framework of the study**



ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

METHODS

Locale of the Study

The locale of the research was the Sofronio Española District, located in the province of Palawan, Philippines. The district has numerous elementary schools that collectively contribute to the educational growth of the area. The district consists of 30 elementary schools, namely Aboabo Elementary School, Bengao Cunsang Elementary School, Bidang Elementary School, Caramay Elementary School, Carasanan Elementary School, El Salvador Elementary School, Eniaran Elementary School, Ipaputo Elementary School, Iraray Elementary School, Isumbo Elementary School, Labog Elementary School, Luntab Elementary School, Malanap Highway Elementary School, Malanap Interior Elementary School, Malangse Hillside Elementary School, Maribong Elementary School, Naltep Elementary School, Olympic Elementary School, Pangatban Elementary School, Panitian Elementary School, Panitian Interior Elementary School, Pansor Elementary School, Pinawpawan Elementary School, Pulot Interior Elementary School, Pulot Shore Elementary School, Punang Elementary School, Sofronio Española Central School, Sincab Elementary School, Suked Elementary School, and Tagbabalat Elementary School.

This district served as the primary location for the study and comprised 281 elementary teachers from various ranks, ranging from Teacher I to Head Teacher III. This location was chosen because it is a rural educational setting that has not yet been extensively studied. Studying this area benefited the district, particularly elementary teachers, by providing valuable insights and practical knowledge. The researcher aimed to investigate teachers' participation in professional development and the factors that hindered their engagement.

Source: https://www.google.com/maps/place/Palawan/@9.95499

Figure 2. **Map of Sofronio Española, Palawan**

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Research Method

This study utilized a quantitative research design employing a descriptive–correlational approach. Allen (2019) explained that quantitative research involves the collection of numerical data, which may be intrinsically quantitative or transformed into numerical form. The collection of quantitative information enabled the researcher to conduct statistical analyses ranging from simple to sophisticated, allowing data to be aggregated, relationships among variables to be examined, and comparisons to be made across datasets.

A descriptive research design describes the characteristics of a population or phenomenon being studied and is primarily used to gain an understanding of a group or phenomenon (Creswell & Creswell, 2023). This study adopted a descriptive approach to examine the demographic characteristics of elementary teachers in the District of Sofronio Española, their awareness of professional development (PD) opportunities, and the challenges they faced in accessing these programs. By describing teachers' profiles, familiarity with PD initiatives, and the barriers they encountered, this approach provided a comprehensive understanding of the factors influencing professional development engagement, particularly in rural educational settings.

Additionally, this study employed a correlational research approach to investigate the relationships between teachers' demographic factors—such as age, educational attainment, and years of experience—and their awareness of professional development (PD) opportunities. It also examined whether barriers such as workload, funding, and transportation significantly influenced teachers' awareness of and engagement with PD initiatives. This approach helped identify patterns and associations among variables within the rural educational context.

Respondents of the Study

The respondents in this research were public elementary school teachers from all elementary schools in the Sofronio Española District. They ranged from Teacher I to Head Teacher III. The study included 281 teachers, distributed across various positions as follows: 104 Teacher I, 24 Teacher II, 120 Teacher III, 16 Master Teacher I, six (6) Master Teacher II, three (3) Head Teacher I, and eight (8) Head Teacher II.

Population and Sample

A census refers to a complete population enumeration, often conducted by government agencies to gather essential demographic data (Anderson, 2001). The researcher employed the census method for data gathering, ensuring that all members of the population were included as respondents. This approach ensured comprehensive and accurate results by considering the responses of every elementary teacher in the district. Including all 281 teachers provided a complete and unbiased dataset, forming a strong foundation for analysis and conclusions.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Research Instrument

The researcher utilized an adapted survey questionnaire. A four-point (4-point) Likert scale was used to gauge the level of professional development available to elementary teachers in the Sofronio Española District and the barriers preventing them from taking advantage of professional development opportunities. A Likert scale assigns quantitative values to qualitative responses, making them suitable for statistical analysis. Each response option was assigned a numerical value, and mean scores were computed to interpret the results of the survey.

The research instrument consisted of three parts:

Part I contained three (3) indicators related to the demographic profile of the respondents: age, highest educational attainment, and number of years of teaching experience in rural areas.

Part II consisted of 30 items that measured teachers' level of awareness of the current professional development opportunities available in Sofronio Española in terms of career progression programs, special programs, and in-service training.

Part III included 25 items that examined the barriers preventing elementary teachers from participating in professional development opportunities, specifically in terms of workloads, funding, transportation access, teachers' needs, and internet accessibility.

The Likert scale questionnaires in Parts II and III were rated from one (1) (strongly disagree) to four (4) (strongly agree). This scoring system enabled the quantification and interpretation of teachers' responses across the different dimensions measured in the study.

Likert scale descriptors

NUMERICAL SCALE	STATISTICAL LIMITS	VERBAL DESCRIPTION	INTERPRETATION
4	3.25-4.00	Strongly Agree	Very High Level
3	2.50-3.24	Agree	High Level
2	1.75-2.49	Disagree	Low Level
1	1.00-1.74	Strongly Disagree	Very Low Level

For the validation of the instrument, the researcher sent a formal request letter, including a copy of the researcher-developed questionnaire, to three (3) experts holding Doctor of Philosophy degrees and one (1) Registered Psychometrician with a strong background in research. They were selected based on their academic and professional expertise to ensure the instrument's relevance, clarity, and appropriateness. The validators evaluated the questionnaire items for clarity, simplicity, cultural sensitivity, and alignment with the study's objectives. They also assessed the instrument's consistency by comparing it with

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

similar instruments or measures that had previously been validated. All feedback, comments, and suggestions from the validators were carefully considered and incorporated to ensure that the questions aligned with the study's objectives.

The researcher conducted pilot testing among thirty (30) non-respondent elementary teachers. Cronbach's alpha, a measure of internal consistency, was used to assess the reliability of the instrument. A higher Cronbach's alpha indicated greater internal consistency among the survey items. A Cronbach's alpha value above 0.70 was set as the benchmark for satisfactory internal consistency, ensuring the instrument's reliability. After completing the pilot test, the researcher proceeded with the actual data gathering. It was also acknowledged that the teachers' level of comprehension and the time allotted for answering the survey questionnaires may have influenced the results of the indicators.

Data Collection Procedure

The researcher sent a letter of request to the College Dean, along with a copy of the manuscript and the validated instrument, requesting permission to conduct the study. The researcher also informed the Schools Division Superintendent of Palawan and the Public Schools District Supervisor of Sofronio Española about the study through formal correspondence and scheduled appointments for personal visits.

Afterward, the researcher visited the offices of the School Heads/Principals of all elementary schools within the Sofronio Española District for courtesy calls, presented the permit to conduct the study, briefly explained the purpose of the research, and requested permission to begin data gathering.

The survey instrument was prepared to ensure that it addressed the study's specific objectives. It was then validated through pilot testing to establish its accuracy and relevance.

During the data collection phase, the researcher personally distributed the survey questionnaires to the respondents. The researcher ensured that the respondents understood the purpose of the data collection, explained the instructions clearly, and informed them that their participation was voluntary. The questionnaires were administered during the respondents' free time within official working hours, from 8:00 a.m. to 5:00 p.m., to ensure convenience and minimal disruption to teaching duties.

After the respondents completed the questionnaires, the researcher collected all survey forms and proceeded with data encoding and organization. The researcher also consulted a statistical expert to analyze the collected data, ensuring the accuracy and validity of the findings through the application of appropriate statistical treatments.

Methods of Data Analysis

The data were subjected to statistical analysis using appropriate techniques. Descriptive statistics, specifically frequency and percentage distributions, were employed to summarize the demographic profile of the respondents in Problem 1. Likewise, Likert-scale responses were summarized

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

using weighted mean values to determine the level of awareness of professional development programs and the barriers to professional development.

Additionally, Spearman's rho was used to examine the relationship between the level of awareness of professional development opportunities available to teachers and the barriers that prevented them from taking advantage of these opportunities, as addressed in Problem 5. A rho value of 0.70 and above indicated a very strong relationship, 0.40–0.69 a strong relationship, and 0.30–0.39 a moderate relationship. A weak relationship was identified when the rho value ranged from 0.20–0.29, while a negligible relationship was indicated by values between 0.01–0.19. These interpretations apply to both positive and negative relationships and were adapted from Dancey and Reidy (2007). This statistical procedure provided a foundation for drawing meaningful conclusions from the data.

The gathered data were organized, tabulated, and analyzed using descriptive statistics, particularly mean scores, to determine the level of awareness of current professional development programs and the barriers preventing elementary teachers from taking advantage of these opportunities. For clarity and ease of reference, legends were provided to interpret the mean scores presented in the tables:

Legend for level of awareness on current professional development programs

Mean Range	Description	Abbreviation
3.51 – 4.00	Highly Aware	HA
2.51 – 3.50	Moderately Aware	MA
1.51 – 2.50	Fairly Aware	FA
1.01 – 1.50	Poorly Aware	PA

Legend for barriers preventing teachers from availing professional development

Mean Range	Description	Abbreviation
3.51 – 4.00	Highly Barrier	HB
2.51 – 3.50	Moderately Barrier	MB
1.51 – 2.50	Fairly Barrier	FB
1.01 – 1.50	Poorly Barrier	PB

These legends ensured that readers could accurately and consistently interpret the ratings presented in all tables throughout the study.

Ethical Considerations

Informed Consent. The researcher requested teachers' permission to participate in the study on a voluntary basis and provided a clear explanation of the study's purpose, procedures, potential risks and benefits, and the voluntary nature of participation. Teachers were informed that they had the right to decline participation or withdraw from the study at any time. Informed consent was obtained before the questionnaires were distributed, ensuring that participation was based on full understanding and free choice.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Privacy and Confidentiality. Respondents' confidentiality was strictly maintained throughout the research process. No identifying information, such as names, school assignments, or employee numbers, was collected in the survey instrument. Responses were treated anonymously and were used only for academic and research purposes. Completed questionnaires were securely stored, with access limited to the researcher, and encoded data were stored in password-protected files. All results were presented in aggregated form to prevent the identification of individual respondents or schools.

Empathetic Approach. To ensure that the survey instrument was appropriate, clear, and non-harmful, it underwent content and ethical validation by three qualified experts, including a licensed psychometrician and doctoral-level professionals with strong backgrounds in educational research. The validators reviewed the instrument for clarity, relevance, cultural sensitivity, and the absence of emotionally or psychologically distressing items. Their recommendations were incorporated prior to pilot testing and final data collection. Throughout the study, the researcher ensured that no form of bias or discrimination based on gender, age, religion, or professional rank was present, and that all participants were treated with respect and fairness.

RESULTS AND DISCUSSION

Table 1. **Selected demographic profile of the elementary teachers**

SELECTED VARIABLES	INDICATORS	FREQUENCY	% (n=281)
A. Age	20-30	80	28.47
	31-40	125	44.48
	41-50	46	16.37
	51 and above	30	10.68
B. Highest Educational Attainment			
	College Degree	79	28.11
	With Master's Units	128	45.55
	CARMA	60	21.35
	Master's Degree	14	4.98
C. Years of Teaching Experience in Rural Areas			
	1-10	87	30.96
	11-20	124	44.13
	21 and above	70	24.91

Table 1 presents the demographic characteristics of elementary school teachers in Sofronio Española, specifically their age, highest educational attainment, and years of rural teaching experience. Understanding these demographics is crucial, as they provide a basis for shaping the district's professional development (PD) approach by highlighting teachers' readiness, motivations, and potential levels of engagement.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

The age distribution shows that most respondents were in the 31–40 age group (44.48%), followed by those aged 20–30 (28.47%). Teachers aged 41–50 years accounted for 16.37%, while those aged 51 years and above comprised only 10.68%. This distribution indicates that the teaching workforce is predominantly young to mid-career, characterized by adaptability, openness to innovation, and strong potential for professional engagement. These findings suggest that PD initiatives should be differentiated according to career stage. Younger teachers may benefit from programs that strengthen foundational competencies and technological skills, while mid-career teachers may require leadership-oriented and skills-enhancement training. Older teachers, on the other hand, may benefit more from reflective, practice-based PD opportunities and mentoring roles that allow them to share expertise without excessive administrative or technological demands.

Previous studies indicate that younger teachers tend to adapt more readily to technological and pedagogical reforms (Nasution et al., 2024), while teachers in their thirties and forties often demonstrate stronger commitment to career advancement and professional mastery (Santos-Pallasigui, 2019). The smaller proportion of teachers aged 51 and above may reflect retirement patterns or difficulties in retaining senior teachers in rural assignments. Although Dulo (2022) observed that veteran teachers may show reduced motivation toward PD when programs lack relevance, research also indicates that they continue to exhibit professional growth when provided with structured, supportive, and context-appropriate training.

In terms of educational attainment, the data indicate that 45.55% of teachers had completed master's units, 28.11% held bachelor's degrees, 21.35% were enrolled in CARMA, and only 4.98% had completed a master's degree. This distribution suggests a workforce that is highly motivated to pursue advanced academic qualifications but constrained by systemic barriers. The implications for PD planning are clear: the district must provide stronger institutional support, such as scholarship opportunities, university partnerships, and flexible scheduling, to encourage degree completion. Given that many teachers are already enrolled in graduate programs, PD offerings should be complementary rather than redundant, emphasizing school-based and practice-oriented learning instead of theoretical content typically covered in graduate coursework. Teachers holding only a bachelor's degree may also require structured guidance to better understand promotion pathways and prepare for further academic advancement.

The large proportion of teachers with master's units reflects strong professional commitment, consistent with the findings of Galeng (2024) and Osei-Owusu (2022), who noted that teachers with advanced academic preparation are more likely to seek PD opportunities and demonstrate higher pedagogical confidence. However, the low percentage of teachers who have completed a master's degree suggests that financial constraints, limited access to graduate institutions, and heavy teaching workloads may hinder degree completion—challenges similarly identified by Yi et al. (2024) in rural education settings.

With respect to rural teaching experience, 44.13% of teachers reported 11–20 years of service in rural schools, 30.96%had 1–10 years, and 24.91% had 21 years or more of rural teaching experience. This distribution indicates that Sofronio Española is served by a stable and experienced teaching workforce with extensive familiarity with the realities of rural education, including multigrade instruction, limited

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

resources, and geographic isolation. These findings imply that PD programs should be explicitly contextualized to rural teaching conditions. Teachers with fewer years of rural experience may benefit from training focused on contextual adaptation, community engagement, differentiated instruction, and localized curriculum development. Meanwhile, teachers with extensive rural experience should be positioned as mentors or resource persons, allowing the district to capitalize on their expertise while sustaining their professional motivation.

Research by S and Bhaskar (2022) and Channa et al. (2024) supports the finding that longer teaching experience is associated with higher PD awareness and stronger professional competence.

However, prolonged service in rural areas may also result in motivational fatigue, particularly when teachers are repeatedly exposed to generic PD programs that fail to address localized instructional challenges. Glover et al. (2016) similarly reported that rural teachers often experience intensified workloads and limited access to PD resources, factors that may reduce sustained engagement.

Overall, the demographic characteristics of teachers in Sofronio Española carry important implications for professional development planning. The predominance of young to mid-career teachers indicates strong long-term potential for professional growth, provided that PD initiatives are responsive to their developmental stages. The high incidence of partially completed graduate studies underscores the need for institutional mechanisms that support academic advancement without increasing workload strain. The substantial rural teaching experience of many teachers highlights the importance of PD programs that are context-based, problem-oriented, and reflective of rural instructional realities. These findings are consistent with the recommendations of Avalos (2011), Tantawy (2020), and Esparagoza et al. (2024), who emphasized that PD must be relevant, differentiated, and grounded in teachers' lived experiences to promote meaningful participation and improved instructional outcomes.

In summary, the demographic profile of teachers in Sofronio Española reflects a workforce with considerable capacity for professional growth. However, this potential can only be realized if professional development opportunities are accessible, contextually relevant, and responsive to teachers' career stages and rural teaching conditions. Such an approach is likely to enhance PD participation, strengthen instructional quality, and contribute to improved learning outcomes across the district.

Table 2.1. **Level of awareness of teachers on career progression programs**

INDICATORS	MEAN	DESCRIPTIVE RATING
1. career progression programs enhance teachers' professional practice.	3.60	HA
2. failure to participate in career progression programs can limit my opportunities for career advancement as a teacher.	3.42	MA
3. career progression programs are aligned with the Philippine Professional Standards for Teachers (PPST).	3.74	HA

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

INDICATORS	MEAN	DESCRIPTIVE RATING
4. regular programs help improve teaching skills for advancing in a career.	3.57	HA
5. regular programs fail to support assessing teachers' skills or meeting their professional learning needs.	2.33	FA
6. subject content programs are made to improve teachers' knowledge of their subject and how to teach it.	3.31	MA
7. regular programs, subject content programs and master classes fail to help teachers understand subject-specific skills or instructional supervision practices.	2.69	MA
8. master classes are advanced training sessions that go beyond regular teaching skills.	3.27	MA
9. master classes lack hands-on or practical learning opportunities.	2.35	FA
10. failure to participate in master classes can limit improvements in my teaching and leadership skills.	2.78	MA
WEIGHTED MEAN	**3.11**	**MA**

Legend. 3.51 - 4.00 - Highly Aware (HA); 2.51 - 3.50 - Moderately Aware (MA); 1.51 - 2.50 - Fairly Aware (FA); 1.01 - 1.50 - Poorly Aware (PA)

Table 2.1 shows that the highest mean score (M = 3.74) reflects the area where teachers demonstrated the highest awareness of the alignment of career progression programs with the Philippine Professional Standards for Teachers. This indicates that most teachers clearly recognize that professional development and advancement initiatives are anchored in nationally defined standards of teacher competence and performance.

The findings imply that while awareness of PPST alignment is strong, the district must operationalize the PPST through contextualized coaching, standards-based classroom observations, and feedback tools. Strengthening practical translation mechanisms will allow teachers to meaningfully apply standards in their local instructional contexts rather than viewing them as abstract policy requirements.

This interpretation is supported by Koniushenko and Komissarova (2025), who stressed that alignment with professional standards strengthens teacher identity and sets clear expectations for performance and development. Similarly, Vaillant (2016) noted that professional standards define what teachers are expected to know and demonstrate at various career stages, while Kumar (2023) argued that standards-based professional development helps ensure that teachers' competencies meet national

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

benchmarks. Taken together, these studies suggest that alignment with professional standards provides a coherent framework for teacher development.

The same table further indicates that the second-highest mean score (M = 3.60) represents respondents reported high level of awareness that career progression programs strengthen professional practice. This suggests that respondents recognize career progression as more than a structural requirement; they perceive it as a mechanism that strengthens pedagogical knowledge, reflective teaching, and instructional decision-making.

The findings imply that while teachers view career progression programs positively, the district must ensure that these initiatives translate into tangible improvements in classroom practice. This necessitates embedding structured mentoring, post-training coaching, and collaborative learning communities so that the competencies emphasized in progression systems become observable in day-to-day instruction. The district must also strengthen program coherence to prevent career progression from becoming a merely formal requirement rather than a substantive avenue for professional growth.

This finding aligns with Santos-Pallasigui (2019), who emphasized that participation in career advancement initiatives cultivates reflective and adaptive teaching behaviors. Similarly, Galeng (2024) documented that teachers engaging in structured career pathways tend to demonstrate heightened commitment to instructional innovation and self-improvement. Liao et al. (2022) also underscored the value of career-oriented PD, demonstrating that clear advancement pathways motivate teachers to integrate evidence-based teaching practices. Collectively, these studies indicate that career advancement opportunities can serve as a strong driver of professional growth and instructional improvement.

Consequently, the indicator that ranked third highest in Table 2.1 (M = 3.57) suggests that teachers expressed high awareness of the role of regular professional development programs in improving teaching skills for career advancement. This result indicates that teachers generally perceive continuous and recurring training activities as important for strengthening instructional competence and supporting long-term professional growth.

The district must ensure that program regularity is coupled with relevance, progression, and contextual specificity. Regular programs should follow a developmental sequence—beginner, intermediate, and advanced—while also integrating classroom application tasks and reflective learning outputs. Doing so prevents routine programs from becoming stagnant and increases their capacity to meaningfully support career progression.

This finding is consistent with Germanos and Longarezi (2019), who emphasized that repeated engagement in professional learning allows teachers to revisit, apply, and refine instructional strategies over time, leading to more effective teaching practices. Together, these studies suggest that regular professional development plays a key role in deepening instructional competence. However, Esparagoza et al. (2024) emphasized that program regularity must be coupled with contextual relevance. In rural areas, teachers may experience PD fatigue when programs feel repetitive or disconnected from classroom realities. Likewise,

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Yi et al. (2024) documented that rural teachers may perceive regular programs as insufficiently responsive to local needs, limiting their impact on instructional improvement.

Conversely, Table 2.1 reveals that the indicator with the lowest mean score (M = 2.33) reflects teachers' perception of limitations in how regular programs respond to individual learning needs or assess skill development. The district must institutionalize systematic needs assessment procedures, such as surveys, focus group discussions, and classroom observation data, to guide PD planning. Moreover, competency assessment tools—such as portfolios, reflective journals, and post-training evaluations—must be integrated to ensure that PD impact is documented and understood. Without these mechanisms, regular programs risk becoming generic, compliance-driven, and disconnected from teachers' realities.

This issue is well documented in the literature. Glover et al. (2016) similarly highlighted that rural teachers often experience PD that does not reflect their instructional challenges or resource limitations. DiBenedetto et al. (2018) further emphasized that PD disengages teachers when programs do not incorporate formative assessment mechanisms to track competency development. In contrast, Booth et al. (2021) argued that needs-based PD leads to higher motivation and improved instructional quality. Taken together, these studies suggest that the effectiveness of professional development depends largely on its responsiveness to teachers' actual needs. The low rating observed here indicates a significant gap between teachers' expectations and program implementation.

The indicator with the second-lowest mean score (M = 2.35) further shows that teachers in Sofronio Española perceive master classes as lacking sufficient hands-on, practice-based learning. This result implies that although these programs are intended to provide advanced professional development, many teachers find them overly theoretical and insufficiently connected to classroom realities in rural settings. As a result, teachers experience difficulty applying learning from master classes to actual instructional tasks, thereby reducing the programs' impact on professional growth.

Although master classes are designed to develop higher-level teaching competence, the low mean score suggests that their current implementation in the district does not fully achieve this objective. Instead of strengthening instructional mastery, the lack of practical components limits teachers' ability to translate theory into improved classroom performance. To address this gap, master classes should incorporate practicum activities, lesson study, demonstration teaching, and practical modeling to better support professional growth in rural school settings.
This result is consistent with Tzotzou et al. (2024), who found that many advanced professional development programs emphasize content delivery rather than experiential learning.

Similarly, Hébert et al. (2021) stressed that meaningful teacher learning occurs when educators are provided with opportunities to apply new knowledge in authentic classroom situations. Opfer and Pedder (2011) also explained that teacher beliefs and instructional practices change more effectively when professional development includes active participation, reflection, and practice rather than passive listening. Taken together, these studies indicate that advanced professional development is most effective when it integrates experiential, reflective, and practice-based components.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Moreover, the indicator ranked third lowest in Table 2.1 (M = 2.69) indicates that teachers expressed moderate awareness of limitations in subject-specific supervision. Although subject-focused and supervisory elements are present in career progression programs, they are not sufficiently strong or consistent to fully support instructional mastery. This suggests that teachers only partially benefit from these programs in developing deeper subject expertise and instructional guidance, which may limit improvements in subject-based teaching practices.

The findings suggest that supervision must be embedded within subject-specific professional development. This may include coaching sessions, peer observations, and supervised practicum activities to ensure that teachers not only acquire conceptual knowledge but also demonstrate effective subject-based instructional practices.

This interpretation is supported by Tzotzou et al. (2024), who found that many professional development programs lack depth in supervision and reflective practice, resulting in surface-level learning rather than substantive instructional improvement. Similarly, Esparagoza et al. (2024) showed that when programs lack modeling, coaching, or practice-based supervision, teachers struggle to internalize subject-specific strategies. Hébert et al. (2021) further emphasized that subject mastery develops through scaffolded coaching and guided practice rather than lecture-based or purely theoretical training.

Collectively, the findings illustrate a teaching workforce that values career progression but identifies critical gaps in program responsiveness, practicality, and instructional relevance. Consistent with the literature, the district must move toward a professional development model that is standards-aligned, needs-based, context-responsive, and supportive of sustained career growth.

Table 2.2. **Level of awareness of teachers on special programs**

INDICATORS	MEAN	DESCRIPTIVE RATING
1. special programs are part of NEAP's plan to improve teachers' and leaders' practical skills.	3.58	HA
2. special programs are designed to develop supplementary competencies for teachers.	3.59	HA
3. special programs focus on supporting additional tasks beyond teaching.	3.03	MA
4. special programs address non-pedagogical tasks.	2.81	MA
5. engaging in special programs promotes continuous professional growth.	3.48	MA
6. special programs lack support in helping me gain skills for modern educational challenges.	2.52	MA
7. failure to participate in special programs can make it harder for me to perform supplementary tasks efficiently.	2.81	MA

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

INDICATORS	MEAN	DESCRIPTIVE RATING
8. failure to participate in special programs weakens my ability to handle non-teaching responsibilities effectively.	2.72	MA
9. special programs are unnecessary for supporting school management functions.	2.55	MA
10. regular assessments are insufficient to guarantee the skills gained through these programs are relevant and effective.	2.40	FA
WEIGHTED MEAN	**2.95**	**MA**

Legend. 3.51 - 4.00 - Highly Aware (HA); 2.51 - 3.50 - Moderately Aware (MA); 1.51 - 2.50 - Fairly Aware (FA); 1.01 - 1.50 - Poorly Aware (PA)

As presented in Table 2.2, the highest mean score (M = 3.59) indicates that teachers strongly acknowledge the contribution of special programs to the development of competencies beyond classroom instruction. Teachers in Sofronio Española recognize that these programs support non-instructional skills such as leadership, communication, organization, and participation in school-related functions—competencies that are essential for effective performance in both instructional and administrative roles.

This result suggests that special programs should deliberately integrate activities that develop leadership capacity, collaborative skills, and administrative competence. The district may strengthen program outcomes by incorporating applied components such as project planning, school governance tasks, and scenario-based activities that reflect real school situations. Such an approach prepares teachers not only for classroom teaching but also for broader institutional responsibilities.

Consistent with this interpretation, Cárdenas (2016) emphasized that leadership and interpersonal competencies enhance teachers' contributions to school improvement. Aparicio and Márquez (2020) likewise highlighted the importance of skills such as data use, community coordination, and resource management in sustaining instructional reforms. Osei-Owusu (2022) further noted that teachers with broader professional skill sets tend to exhibit stronger initiative and collaborative problem-solving. However, Xie et al. (2023) observed that access to programs developing these competencies remains uneven, particularly in under-resourced contexts. This may explain why teachers perceive special programs positively while still encountering limitations in skill development.

The second-highest mean score (M = 3.58) reflects strong awareness of national initiatives designed to enhance instructional competencies. This indicates that teachers regard these initiatives as important mechanisms for improving classroom practice.

Despite this awareness, the findings point to the need for contextual adaptation. National programs, including those under NEAP, must be localized to reflect district-specific conditions. Embedding school-based coaching, demonstration lessons, and community-responsive training designs can improve relevance and usability. Without such adjustments, nationally developed programs may remain conceptually valuable but practically limited.

This view aligns with Germanos and Longarezi (2019), who argued that national professional development frameworks provide direction for instructional improvement. Similarly, Cárdenas (2016) emphasized that nationally designed programs promote coherence in competency development. Vaillant (2016) further noted that practice-oriented professional development strengthens teachers' capacity to address diverse learning needs. In contrast, Yi et al. (2024) cautioned that national programs often lose effectiveness in rural contexts due to resource and access constraints, a concern that may apply to Sofronio Española.

The third-highest mean score (M = 3.48) suggests that teachers believe special programs contribute to professional growth, although not consistently enough to support sustained development. This indicates that while programs are viewed as beneficial, gaps in continuity, relevance, or follow-up may reduce their long-term impact.

To address this concern, special programs should be embedded within a continuous professional learning structure that includes mentoring, coaching, and iterative skill development. Cyclical learning processes—such as reflection sessions and classroom-based application—can help ensure that learning extends beyond isolated training events.

This finding is supported by Koniushenko and Komissarova (2025), who emphasized the importance of coherence and continuity in professional development. Avalos (2011) similarly argued that professional growth is most effective when PD is sustained and closely connected to classroom practice. Esparagoza et al. (2024) further observed that progressive PD models strengthen long-term instructional improvement, while Xie et al. (2023) noted that disconnected programs reduce perceived relevance.

In contrast, the lowest mean score (M = 2.40) highlights teachers' concerns regarding the lack of systematic evaluation in special programs. This suggests limited mechanisms for assessing program effectiveness and monitoring skill development.

The district should therefore institutionalize evaluation processes such as classroom observations, performance-based assessments, and reflective documentation. Establishing clear evaluation protocols can strengthen accountability, guide program refinement, and ensure that professional development leads to measurable instructional improvement.

Supporting this recommendation, Avalos (2011) emphasized that systematic assessment is essential for sustained PD impact. Tzotzou et al. (2024) underscored the role of evaluation in measuring changes in teaching practice, while Booth et al. (2021) warned that the absence of evaluation can render PD repetitive and ineffective. Vaillant (2016) further noted that integrating assessment tools enhances teacher learning and instructional transfer.

The second-lowest mean score (M = 2.52) indicates moderate awareness that special programs help teachers address current educational challenges. This suggests that program content may not be sufficiently aligned with contemporary instructional demands.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

To improve relevance, special programs should incorporate topics such as digital pedagogy, inclusive education, differentiated instruction, and 21st-century competencies. Hands-on technology workshops, problem-based learning activities, and locally grounded innovations may help bridge the gap between current practice and evolving educational expectations.

This interpretation is consistent with Xie et al. (2023), who emphasized the need for PD to adapt to rapid technological change. Hébert et al. (2021) similarly argued that modern PD must integrate learner-centered and digitally supported approaches. Yi et al. (2024) further reported that rural teachers face additional challenges in adopting modern practices due to infrastructure and training limitations.

The third-lowest mean score (M = 2.63) indicates perceived gaps in the application of program content to daily work tasks. While some teachers benefit from special programs, others struggle to translate learning into practice.

This finding suggests the need for PD designs that prioritize authentic tasks, simulations, and context-specific examples. Emphasizing feedback, guided practice, and iterative improvement can strengthen application and efficiency in daily teaching tasks.

This observation aligns with Esparagoza et al. (2024), who found that PD is most effective when directly linked to teachers' work. Hébert et al. (2021) and DiBenedetto et al. (2018) similarly emphasized the importance of practice-based and reflective learning. In contrast, Xie et al. (2023) noted that theoretically oriented programs often fail to improve efficiency when contextual relevance is lacking.

Overall, the findings indicate that while teachers view special programs as valuable, their effectiveness is limited by gaps in contextual relevance, practical application, and systematic evaluation. Consistent with existing literature, professional development must be continuously refined and localized to ensure sustained relevance and meaningful impact in rural school settings.

Table 2.3. **Level of awareness of teachers on in-service training for teachers**

INDICATORS	MEAN	DESCRIPTIVE RATING
1. INSET provides opportunities for skill enhancement.	3.78	HA
2. INSET sessions are tailored to meet teachers' classroom needs.	3.79	HA
3. it aims to develop skills relevant to 21st-century teaching and leadership.	3.80	HA
4. INSET programs is sufficient for professional growth.	3.36	MA
5. INSET activities contribute to overall teaching effectiveness.	3.37	MA
6. some INSET sessions fail to include Higher Order Thinking Skills (HOTS) for English, Math, and Science.	2.35	FA

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

INDICATORS	MEAN	DESCRIPTIVE RATING
7. INSET sessions fail to address the learning and development needs that teacher identify.	2.41	FA
8. Maintenance and Other Operating Expenses (MOOE) funds can be used to cover School-Based INSET expenses.	3.32	MA
9. INSET fails to keep me updated with new teaching strategies and methods.	2.55	MA
10. INSET sessions lack a participatory and practical approach, offering no hands-on learning experiences.	2.50	FA
WEIGHTED MEAN	**3.12**	**MA**

Legend. 3.51 - 4.00 - Highly Aware (HA); 2.51 - 3.50 - Moderately Aware (MA); 1.51 - 2.50 - Fairly Aware (FA); 1.01 - 1.50 - Poorly Aware (PA)

As shown in Table 2.3, the highest mean score (M = 3.80) corresponds to the integration of 21st-century competencies such as digital literacy, critical thinking, collaboration, and creativity. This indicates that teachers in Sofronio Española clearly perceive INSET programs as aligned with contemporary teaching demands and current educational priorities.

While awareness of 21st-century competencies is high, the findings suggest that INSET must move beyond conceptual discussion and emphasize strategies that are feasible in rural contexts. Training activities should include hands-on digital literacy sessions, the use of offline or low-technology instructional tools, and localized classroom examples. These approaches can help teachers apply modern competencies despite infrastructure limitations.

This result is consistent with Vaillant (2016), who emphasized that professional development should equip teachers with competencies responsive to contemporary pedagogical challenges. Koniushenko and Komissarova (2025) likewise found that PD focused on 21st-century skills strengthens learner-centered instruction and higher-order thinking. Hébert et al. (2021) also reported that integrating digital pedagogy into PD enhances teacher confidence and instructional effectiveness. However, Xie et al. (2023) and Yi et al. (2024) cautioned that limited technological resources in rural settings often restrict the practical application of these skills. This supports the present finding that strong awareness does not always translate into consistent classroom practice in Sofronio Española.

Closely following, the second-highest mean score (M = 3.79) reflects teachers' perception that INSET responds to instructional challenges they encounter in daily teaching. This suggests that teachers find the training relevant in addressing learner diversity, lesson delivery concerns, and classroom management issues.

The results underscore the importance of maintaining a needs-responsive INSET framework through regular training needs assessments, classroom observations, and structured teacher consultations.

These mechanisms ensure that training content remains grounded in actual classroom conditions and supports meaningful instructional improvement.

This finding aligns with DiBenedetto et al. (2018), who noted that PD grounded in classroom realities enhances teachers' instructional decision-making and reflective practice. Quilapio and Callo (2022) similarly found that INSET programs designed around teacher-identified needs are more effective in supporting instructional improvement. Esparagoza et al. (2024) further emphasized that PD aligned with situational challenges promotes adaptive teaching expertise. Nonetheless, Yi et al. (2024) observed that rural teachers face unique constraints such as multigrade classes and limited instructional materials, indicating that further localization of INSET content remains necessary.

The third-highest mean score (M = 3.78) indicates that teachers recognize INSET as instrumental in improving instructional skills and classroom performance. Teachers associate participation in INSET with better lesson planning, instructional strategies, and classroom management, reflecting positive perceptions of its relevance to teaching practice.

However, the findings suggest that INSET should function as a structured developmental process rather than a stand-alone activity. Post-training mentoring, coaching, and feedback cycles are necessary to sustain instructional gains and ensure that learning transfers effectively into classroom practice.

This interpretation is supported by Quilapio and Callo (2022), who emphasized that INSET provides opportunities for teachers to apply updated pedagogical strategies. Vaillant (2016) likewise argued that continuous, school-based PD strengthens instructional competence. Germanos and Longarezi (2019) further noted that practice-oriented INSET promotes the application of new knowledge in real teaching contexts. In contrast, Xie et al. (2023) reported that the absence of follow-up mechanisms often limits the impact of INSET, suggesting that implementation quality remains a critical factor.

In contrast, the lowest mean score (M = 2.35) reflects limited awareness that INSET supports the development of higher-order thinking skills (HOTS). This suggests that teachers perceive many INSET sessions as emphasizing procedural or foundational content rather than instructional strategies that promote analysis, evaluation, and creativity.

This finding indicates the need to redesign INSET to explicitly address HOTS through inquiry-based learning, case analysis, problem-based instruction, and strategies for assessing higher-order cognition. Incorporating lesson modeling and practice teaching can further strengthen teachers' capacity to foster deeper learning.

This concern is echoed by Tzotzou et al. (2024), who found that many PD programs prioritize content delivery over cognitive engagement. Hébert et al. (2021) similarly observed that PD often lacks emphasis on higher-order pedagogies, while DiBenedetto et al. (2018) stressed the importance of metacognitive and inquiry-based PD for developing HOTS. These findings help explain the low awareness reported by teachers in this study.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

The second-lowest mean score (M = 2.41) indicates that teachers perceive INSET as insufficiently aligned with their specific learning needs. Despite the availability of training activities, many teachers feel that INSET content does not fully reflect their classroom challenges, professional goals, or local concerns. This suggests a reliance on standardized training formats that may limit contextual relevance.

The findings point to the need for systematic needs assessment procedures, including surveys, focus group discussions, classroom observations, and performance diagnostics. Strengthening these processes can improve relevance, increase teacher engagement, and enhance professional satisfaction.

This result is supported by Avalos (2011), who noted that PD is less effective when it does not address teachers' self-identified needs. DiBenedetto et al. (2018) likewise emphasized that needs-responsive PD enhances motivation and instructional improvement. Esparagoza et al. (2024) further stressed that PD grounded in teacher needs leads to deeper competence. In contrast, Quilapio and Callo (2022) highlighted the importance of teacher consultation in INSET design, which appears limited in Sofronio Española.

The third-lowest mean score (M = 2.50) indicates moderate awareness that INSET lacks participatory and interactive learning activities. This suggests that many sessions may rely heavily on lecture-based delivery, which is less effective for adult learners.

To address this limitation, INSET should incorporate interactive approaches such as microteaching, lesson study, collaborative workshops, coaching cycles, and model lessons. These strategies promote engagement, skill application, and professional collaboration.

This observation aligns with Quilapio and Callo (2022), who found that PD becomes meaningful when teachers actively participate. Opfer and Pedder (2011) similarly emphasized collaborative and reflective learning, while Hébert et al. (2021) highlighted the role of experiential learning in instructional innovation. Germanos and Longarezi (2019) further reported that schools implementing active-learning PD models show stronger improvements in teaching practice.

Overall, the results in Table 2.3 indicate that while teachers recognize the value of INSET—particularly in strengthening instructional skills, addressing classroom challenges, and developing 21st-century competencies—significant gaps remain in relevance, depth, innovation, and responsiveness. High awareness across several indicators reflects INSET's potential contribution to instructional improvement. However, lower ratings in other areas reveal concerns related to outdated content, limited participation, weak needs alignment, and insufficient focus on HOTS.

Consistent with existing literature, professional development is effective not merely by its presence but by its coherence, contextual relevance, active-learning design, and sustained implementation (Avalos, 2011; Opfer & Pedder, 2011; Vaillant, 2016; Yi et al., 2024; Xie et al., 2023). Accordingly, INSET in Sofronio Española must continue evolving toward a more needs-based, practice-oriented, and context-responsive model to fully support teacher development and instructional improvement.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Table 3.1. **Barriers encountered by teachers related to workload**

INDICATORS	MEAN	DESCRIPTIVE RATING
1. daily teaching responsibilities allow sufficient time for professional development.	1.94	FB
2. paperwork and administrative tasks hinder participation in training.	3.03	MB
3. classroom management duties provide ample availability for PD sessions.	2.01	FB
4. the workload assigned to teachers makes it difficult to attend training.	2.99	MB
5. Schools often fail to allocate enough time for teachers' professional development.	2.77	MB
WEIGHTED MEAN	**2.55**	**MB**

Legend. 3.51 - 4.00 - Highly Barrier (HB); 2.51 - 3.50 - Moderately Barrier (MB); 1.51 - 2.50 - Fairly Barrier (FB); 1.01 - 1.50 - Poorly Barrier (PB)

The findings indicate that workload functions as a moderate barrier to professional development, with an overall weighted mean of 2.55. This suggests that teachers regularly experience difficulty balancing routine responsibilities with opportunities for professional learning. A closer examination of the indicators in Table 3.1 clarifies the specific sources of this constraint.

The highest mean score (M = 3.03), interpreted as a moderate barrier, shows that paperwork and administrative tasks significantly hinder teachers' participation in professional development. Teachers in Sofronio Española perceive clerical duties and documentation requirements as recurring demands that limit both time and energy for training activities. The relatively high mean score indicates that administrative responsibilities consistently compete with professional learning opportunities.

These results point to the need for institutional strategies aimed at reducing paperwork demands. Possible measures include simplifying reporting requirements, assigning clerical assistance during peak documentation periods, and using standardized digital templates to reduce preparation time. Scheduling professional development during periods of lower administrative demand may also improve participation and reduce work-related stress.

This finding aligns with Abdullah and Hassan (2024) and Lagawid (2024), who reported that excessive paperwork contributes to teacher fatigue and lowers motivation to engage in professional learning. Eroğlu and Donmus Kaya (2021) further noted that misalignment between administrative cycles and professional development schedules intensifies this challenge. When training activities coincide with reporting deadlines, participation is often reduced. The present results reinforce these observations, highlighting administrative workload as one of the most persistent barriers to professional development.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

The second-highest mean score (M = 2.99) indicates that teachers perceive their overall workload as a moderate obstacle to attending professional development activities. This suggests that the volume and complexity of assigned responsibilities—ranging from instruction to ancillary duties—restrict teachers' ability to disengage from routine tasks to participate in training. Even when professional development opportunities are available, competing obligations often limit attendance.

Addressing this issue requires policy-level intervention. Measures such as redistributing responsibilities, providing substitute or relief teachers during training days, and offering institutional incentives for prioritizing professional learning may help reduce participation gaps. Without such support, professional development is likely to remain accessible only to teachers with relatively lighter workloads.

This finding is consistent with Ennes et al. (2021) and Rizka et al. (2024), who found that heavy workloads constrain sustained engagement in professional learning. These studies emphasize that workload-related barriers are not merely time-related but are rooted in broader organizational structures, including staffing arrangements and uneven task distribution. Glover et al. (2016) similarly reported that while professional development enhances pedagogical competence, its benefits are limited when teachers are unable to manage routine responsibilities alongside training requirements.

The third-highest mean score (M = 2.77) reflects teachers' perception that insufficient time is formally allocated for professional development. This suggests that professional learning is not consistently embedded in school schedules and is often treated as secondary to instructional and administrative priorities. The result indicates that professional development time is neither systematically protected nor strategically planned.

To address this concern, schools should formally integrate professional development into annual calendars and school improvement plans. Publishing clear PD schedules and linking participation to performance frameworks may strengthen institutional commitment. The findings suggest that time allocation reflects organizational priorities; when PD time is not formally safeguarded, teachers perceive professional learning as optional rather than essential.

This interpretation is supported by Ennes et al. (2021), who emphasized that school culture and leadership priorities strongly influence teacher participation in professional development. Tantawy (2020) similarly argued that effective professional learning requires deliberate time allocation rather than expecting teachers to accommodate training within already congested schedules. These studies help explain why teachers in Sofronio Española view time allocation as a limiting factor.

In contrast, the lowest mean score (M = 1.94), interpreted as a fair barrier, indicates that daily teaching responsibilities moderately limit teachers' time for professional development. Classroom instruction, lesson preparation, and learner management occupy a substantial portion of teachers' schedules, reducing—but not eliminating—opportunities for professional learning.

This result reflects the realities of rural teaching contexts, where educators often perform multiple roles simultaneously. While instructional duties may take precedence, they do not completely prevent

participation in professional development. Schools can adopt strategies such as embedding short, job-embedded learning activities into weekly schedules, rotating teacher coverage during intensive training periods, and reviewing non-instructional tasks for possible reassignment or streamlining.

This finding is consistent with Opfer and Pedder (2011), who identified instructional duties as a common structural challenge but emphasized that their impact can be reduced through intentional scheduling and embedded learning. Rizka et al. (2024) and Ennes et al. (2021) likewise noted that rural teachers frequently manage multiple responsibilities but can still engage in professional learning when institutional support mechanisms are in place. Juma (2024) further highlighted that protected PD time and structured lesson-study cycles can significantly reduce the effects of instructional workload.

The second-lowest mean score (M = 2.01) indicates that classroom management responsibilities pose a fair barrier to professional development. This suggests that the cognitive and emotional demands of managing learners and addressing behavioral concerns may limit teachers' capacity to participate fully in training activities. However, the rating also indicates that these responsibilities do not completely restrict access to professional learning.

Schools can mitigate this constraint by implementing peer-support arrangements, temporary class coverage during training sessions, and mentoring partnerships. Lesson study and collaborative learning activities conducted during non-instructional periods may also provide meaningful development opportunities without disrupting classroom management.

This finding aligns with Rizka et al. (2024), who reported that teachers handling large or multigrade classes often face reduced capacity for sustained professional learning. However, participation remains feasible when professional development is designed to accommodate workload realities. S and Bhaskar (2022) similarly observed that experienced teachers develop strategies to balance classroom demands with learning opportunities, reinforcing the view that classroom management is a manageable constraint rather than a prohibitive barrier.

Overall, the results indicate that workload-related barriers to professional development arise from interconnected instructional, administrative, and organizational factors. While individual responsibilities consume significant time and effort, the most influential constraints stem from institutional systems that insufficiently prioritize or structure professional learning. Addressing these barriers requires coordinated action at both school and division levels, including streamlining administrative processes, protecting professional development time, redistributing workload, and embedding professional learning within school culture. Through such systemic reforms, teachers can more effectively engage in sustained professional growth.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Table 3.2. **Barriers encountered by teachers related to funding**

INDICATORS	MEAN	DESCRIPTIVE RATING
1. sufficient financial support enhances access to professional development (PD) programs.	1.55	FB
2. teachers struggle to afford transportation and training materials.	3.09	MB
3. professional development activities are often provided without requiring out-of-pocket expenses.	2.35	FB
4. adequate school funding can greatly enhance teacher participation in PD programs	1.70	FB
5. the cost of professional development programs is a major barrier.	3.25	MB
WEIGHTED MEAN	**2.39**	**FB**

Legend. 3.51 - 4.00 - Highly Barrier (HB); 2.51 - 3.50 - Moderately Barrier (MB); 1.51 - 2.50 - Fairly Barrier (FB); 1.01 - 1.50 - Poorly Barrier (PB)

The findings indicate that funding constitutes a fair barrier to teachers' participation in professional development, with an overall weighted mean of 2.39. Although financial constraints are less pronounced than workload and transportation issues, they continue to influence teachers' access to training opportunities in meaningful ways.

As shown in Table 3.2, the highest mean score (M = 3.25) identifies the cost of professional development programs as the most significant financial constraint. Teachers reported that registration fees, certification charges, and specialized training expenses limit their ability to participate, particularly in under-resourced and geographically remote schools. This result reflects a shared perception that the financial requirements attached to professional development often exceed teachers' personal capacity to pay.

These findings raise concerns about equity in access to professional learning. When participation depends on personal financial resources, opportunities for growth become unevenly distributed. Similar conclusions were drawn by Mpahla and Okeke (2015), Khotimah et al. (2024), and Darling-Hammond et al. (2017), who found that high participation costs disproportionately exclude teachers in rural and low-income contexts. Collectively, these studies help explain why financial barriers in Sofronio Española may limit some teachers' engagement in career-enhancing professional development activities.

The next highest mean score (M = 3.09) indicates that out-of-pocket expenses, particularly those related to transportation, meals, and learning materials, also present a substantial barrier. Teachers in Sofronio Española often shoulder these costs themselves, which discourages participation even when

training programs are available. The mean score suggests that such expenses are recurring and significant enough to affect decision-making.

This result reflects the realities of rural contexts, where teachers frequently travel long distances under challenging conditions to attend training sessions. As a result, transportation and material costs become decisive factors in participation. Consistent with this finding, Khotimah et al. (2024) and Mpahla and Okeke (2015) reported that transportation expenses in geographically isolated areas significantly reduce attendance in professional development activities. Darling-Hammond et al. (2017) likewise noted that indirect costs can reinforce inequities by limiting participation to those who can afford travel and materials.

The third-highest mean score (M = 2.35) suggests inconsistency in the level of financial support provided for professional development activities. While some programs are fully subsidized, others require partial or full payment by teachers. This variability introduces uncertainty and affects teachers' willingness to participate.

Such inconsistency contributes to uneven access to professional development, particularly in resource-constrained settings. Eroğlu and Donmuş Kaya (2021) similarly observed that irregular funding arrangements reduce participation and shift the burden of cost onto individual teachers. Avalos (2011) described this pattern as structural inequity, where access to professional learning depends more on available resources than on instructional priorities. These perspectives help explain why variations in financial support function as a barrier in Sofronio Española.

In contrast, the lowest mean score (M = 1.55), interpreted as a fair barrier, indicates that although financial support is limited, it does not entirely prevent teachers from engaging in professional development. Teachers acknowledged constraints related to registration fees, materials, and incidental expenses, yet participation remains possible under certain conditions.

To strengthen access, schools and division offices may adopt strategic financing measures, such as allocating portions of Maintenance and Other Operating Expenses (MOOE) for capacity-building, seeking support from Local Government Units, and applying for external grants. Establishing multi-year funding plans or professional development trust funds may also promote continuity and reduce reliance on short-term, event-based spending.

This finding aligns with Eroğlu and Donmuş Kaya (2021) and Khotimah et al. (2024), who noted that rural schools often manage to sustain professional learning through alternative strategies, including school-based training, shared facilitation, and community support. Glover et al. (2016) similarly found that partial funding can still enable participation in workshops and localized professional development activities. Darling-Hammond et al. (2017) further emphasized that institutional support and teacher motivation can offset financial limitations, allowing continued engagement despite constrained resources.

The second-lowest mean score (M = 1.70) reinforces this pattern, indicating that while funding limitations exist, they do not fully restrict access to professional development. Teachers reported that some

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

learning opportunities remain available through locally supported initiatives, low-cost activities, and school-based strategies. This explains why funding is viewed as a manageable rather than prohibitive barrier.

To improve effectiveness, schools may adopt evidence-based planning approaches grounded in needs assessments, classroom observation data, and competency standards. Financial resources should prioritize sustained learning models—such as mentoring, coaching, and lesson study—rather than isolated training events. Establishing professional development quality committees at the division level may further ensure alignment between funding decisions and instructional goals.

Consistent with these findings, Glover et al. (2016) and Khotimah et al. (2024) reported that schools with limited resources can still support professional learning through flexible and collaborative approaches. Darling-Hammond et al. (2017) also emphasized that teacher commitment and institutional support can partially compensate for funding constraints.

Taken together, the results indicate that financial barriers to professional development are shaped not only by individual economic capacity but also by systemic factors such as budgeting practices, funding consistency, and logistical realities in rural settings. The literature consistently shows that strategic and equitable financing increases participation, sustains learning initiatives, and reduces disparities. Accordingly, strengthening the district's professional development system requires transparent policies, consistent funding mechanisms, and deliberate investment in teacher learning.

Table 3.3. **Barriers encountered by teachers related to transportation**

INDICATORS	**MEAN**	**DESCRIPTIVE RATING**
1. distance to training venues affects participation in PD sessions.	3.32	MB
2. poor access to transportation makes attending PD difficult.	3.29	MB
3. travel costs hinder teachers from participating in training programs.	3.26	MB
4. establishing training centers in remote areas can improve access to professional development.	1.65	FB
5. providing transportation support can enhance teacher participation in PD activities.	1.35	PB
WEIGHTED MEAN	**2.57**	**MB**

Legend. 3.51 - 4.00 - Highly Barrier (HB); 2.51 - 3.50 - Moderately Barrier (MB); 1.51 - 2.50 - Fairly Barrier (FB); 1.01 - 1.50 - Poorly Barrier (PB)

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Transportation emerged as a moderate barrier to teachers' participation in professional development, with a weighted mean of 2.57, making it one of the more persistent challenges faced by teachers in Sofronio Española. Distance to training venues and limited transportation options constrain regular attendance. Previous studies describe these constraints as both logistical and equity-related, as physical distance and inadequate transport systems increase time and financial costs, disproportionately affecting teachers in remote and low-income communities (Glover et al., 2016; Mpahla & Okeke, 2015; World Bank, 2021).

As shown in Table 10, the highest mean score (M = 3.32) indicates that distance to training venues is the most significant transportation-related barrier. This finding suggests that extended travel time, increased expenses, and logistical complexity discourage consistent participation in professional development, particularly for teachers assigned to geographically isolated schools. Distance therefore functions as a recurring structural constraint rather than an occasional inconvenience.

To reduce the impact of distance, professional development activities should be decentralized. Cluster-based training models, rotating host schools, and the use of barangay halls or community learning spaces can reduce travel demands. Institutionalizing mobile training teams and strengthening school-based Learning Action Cells (LACs) would further ensure that professional development reaches teachers directly, rather than requiring extensive travel.

This finding is consistent with Aparicio and Marquez (2020), who reported that teachers located far from training centers demonstrate lower attendance due to added time and resource demands. Glover et al. (2016) likewise observed that centralized training disproportionately disadvantages teachers from distant barangays. Mpahla and Okeke (2015) further noted that in geographically dispersed districts, distance often determines participation, as travel interferes with classroom responsibilities and personal commitments. Eroğlu and Donmuş Kaya (2021) added that when travel demands outweigh perceived benefits, teachers are less likely to engage in professional development. Khotimah et al. (2024) also found that long travel distances reduce both attendance and engagement due to fatigue and time pressure. These findings collectively explain why distance remains a tangible barrier in rural contexts such as Sofronio Española.

The second-highest mean score (M = 3.29) reflects limited transportation access as a moderate barrier. This indicates that unreliable, unsafe, or infrequent transportation options restrict teachers' ability to attend training activities, even when venues are not especially distant. The result highlights that availability and reliability of transport are as influential as geographic distance in shaping participation.

To address this concern, transportation planning should be integrated into professional development delivery. Divisions and Local Government Units (LGUs) may coordinate pooled transport services, scheduled shuttles, or transportation allowances for major training events. Advance planning of transport logistics can promote safety, punctuality, and equitable access for teachers from remote barangays.

This finding aligns with Mpahla and Okeke (2015), who described poor transportation networks as a systemic disadvantage for rural teachers. Aparicio and Márquez (2020) similarly noted that transportation

scarcity amplifies geographic barriers, forcing reliance on costly private arrangements. Glover et al. (2016) emphasized that irregular public transport often prevents timely attendance. Diliberti et al. (2020) further observed that transportation constraints reduce participation, particularly when access varies by season or weather conditions. Atiya (2022) reinforced that transportation barriers are closely tied to rural infrastructure limitations and socio-economic inequities.

The third-highest mean score (M = 3.26) indicates that travel-related costs constitute a significant barrier to professional development. Expenses for fuel, fares, meals, and incidental travel discourage participation, particularly when teachers must shoulder these costs personally. The mean score suggests that travel expenses consistently limit access to professional learning opportunities.

Schools and divisions should therefore institutionalize financial support mechanisms, including transportation allowances, reimbursement schemes, or fuel subsidies. Cluster-based training delivery and hybrid or online formats may further reduce travel-related expenses. Allocating funds for transportation support should be a standard component of professional development planning to promote equitable participation.

This finding is supported by Khotimah et al. (2024), who found that indirect costs often outweigh perceived benefits of attending professional development, especially in rural contexts. Mpahla and Okeke (2015) similarly identified transportation expenses as a primary deterrent, even when training fees are waived. Glover et al. (2016) noted that teachers living far from municipal centers bear disproportionate financial burdens. Sovacool et al. (2021) added that poor infrastructure increases fuel consumption and travel costs, while Al-Mahdi (2019) reported that insufficient subsidies discourage participation among teachers with limited financial capacity. Together, these studies confirm that travel costs remain a decisive financial constraint.

In contrast, the lowest mean score (M = 1.35) indicates that limited transportation support is perceived as a fair barrier. This suggests that while transportation assistance is recognized as important, many teachers are still able to attend professional development through personal arrangements or school-level support. The constraint reduces convenience but does not completely prevent participation.

Expanding transportation-support initiatives—such as scheduled shuttles, ride-sharing programs, LGU-supported transport, or travel vouchers—can further ease this burden. Institutionalizing transportation support as a routine component of professional development may strengthen consistency and participation over time.

This finding aligns with Mpahla and Okeke (2015), who emphasized that logistical support reduces geographic inequities but does not entirely determine participation. Khotimah et al. (2024) likewise found that partial assistance increases willingness to attend training, even when full support is unavailable. Aparicio and Márquez (2020) noted that predictable transport arrangements reduce stress and improve engagement. Glover et al. (2016) similarly observed that teachers adapt to travel challenges when support is limited, suggesting that the barrier is manageable.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

The second-lowest mean score (M = 1.65) indicates that proximity to training venues is an important factor in reducing travel demands, though many teachers continue to attend professional development through school-based alternatives. This result suggests that proximity affects frequency and convenience rather than completely restricting access.

Divisions and LGUs may enhance participation by establishing strategic cluster hubs using existing facilities such as central schools, district offices, or community learning centers. Rotating professional development activities across these hubs can reduce travel demands, encourage local participation, and strengthen community-based capacity-building. This interpretation is supported by Aparicio and Marquez (2020), who found that localized training centers increase accessibility, while Mpahla and Okeke (2015) noted that proximity improves engagement without eliminating participation in centralized programs. Glover et al. (2016) highlighted those decentralized venues, combined with school-based support mechanisms like LACs and peer mentoring, promote continuity of learning. Harris and De Bruin (2018), Khoza (2019), and Darling-Hammond et al. (2017) likewise emphasized that proximity enhances effectiveness, even though teachers may still attend distant training when necessary.

Overall, transportation-related barriers in Sofronio Española are best characterized as moderate and manageable. While distance, access, and travel costs influence convenience and participation frequency, they do not fully prevent teachers from engaging in professional development. Addressing these barriers through decentralization, logistical planning, and targeted financial support can significantly improve access and sustain professional learning in rural contexts.

Table 3.4. **Barriers encountered by teachers related to teachers' needs**

INDICATORS	MEAN	DESCRIPTIVE RATING
1. aligning PD programs with real classroom challenges enhances their relevance and impact.	1.33	PB
2. training content is often too theoretical and lacks practical application.	3.15	MB
3. PD sessions focuses on daily teaching needs to address actual classroom challenges.	1.67	FB
4. teachers struggle to apply concepts learned in PD training.	2.95	MB
5. tailoring PD programs to specific subject needs can significantly enhance their effectiveness.	1.73	FB
WEIGHTED MEAN	**2.16**	**FB**

Legend. 3.51 - 4.00 - Highly Barrier (HB); 2.51 - 3.50 - Moderately Barrier (MB); 1.51 - 2.50 - Fairly Barrier (FB); 1.01 - 1.50 - Poorly Barrier (PB)

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Barriers related to teachers' needs yielded a weighted mean of 2.16, indicating a fair barrier. While this rating suggests that the constraint is not severe, teachers raised specific concerns regarding the relevance, applicability, and instructional value of professional development (PD) activities.

As shown in Table 3.4, the highest mean score (M = 3.15) indicates that teachers perceive many PD programs as overly theoretical. This perception suggests that training activities are often disconnected from classroom realities, reducing their immediate usefulness and limiting sustained instructional application. The elevated mean reflects concern that lecture-heavy formats do not adequately support the translation of concepts into daily teaching practices.

These findings point to the need for PD designs that emphasize application and practice. Training activities may be strengthened by incorporating microteaching, lesson study, classroom-based demonstrations, video reflection, and in-class coaching. Ensuring that each PD activity includes opportunities for enactment and feedback may increase the likelihood that learning translates into classroom practice.

This result is consistent with Tzotzou et al. (2024) and Avalos (2011), who reported that theory-focused professional development has limited impact when opportunities for practice are absent. Quilapio and Callo (2022), as well as Butangen and Azarias (2024), likewise found that teachers are more likely to engage with and apply learning when PD includes microteaching, lesson study, and coached implementation. Darling-Hammond et al. (2017) demonstrated that professional development combining demonstration, guided practice, and follow-up produces substantially higher classroom adoption than lecture-based approaches alone. These findings help explain why teachers in this study identified overly theoretical PD as a notable barrier.

The next highest mean score (M = 2.95) reflects teachers' difficulty in transferring professional learning into classroom practice. This result suggests that although teachers are exposed to new ideas during PD, they often encounter challenges when attempting to implement these strategies in actual teaching contexts. The mean highlights a persistent gap between learning acquisition and instructional application.

Addressing this gap requires sustained post-training support. Structured coaching cycles, peer observation with shared criteria, and classroom-based inquiry projects may help teachers refine and adapt new strategies. Evaluating PD effectiveness based on observable changes in practice rather than attendance alone may further support implementation.

This finding aligns with Tzotzou et al. (2024) and Xie et al. (2023), who emphasized that without follow-up support, teachers struggle to apply new instructional approaches. Quilapio and Callo (2022) underscored the role of coaching and peer feedback in increasing implementation fidelity. Opfer and Pedder (2011) further argued that teacher learning is socially situated, indicating that isolated training sessions are unlikely to result in lasting instructional change without collaborative and structural support.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

The third-highest mean score (M = 1.73) indicates that subject-specific professional development is generally viewed as useful and accessible, though teachers still identify areas for improvement. This result suggests that discipline-focused training addresses instructional needs to some extent but may lack consistency or coherence across programs.

Research by Mpahla and Okeke (2015) and DiBenedetto et al. (2018) supports this finding, showing that subject-specific PD strengthens content knowledge and supports appropriate pedagogical strategies. Darling-Hammond et al. (2017) further highlighted the effectiveness of PD models that integrate content knowledge with pedagogy. However, Avalos (2011) cautioned that fragmented or isolated subject-based workshops may weaken long-term professional learning coherence. This perspective explains why teachers perceive subject-specific PD as beneficial while still identifying room for improvement.

In contrast, the lowest mean score (M = 1.33) suggests that misalignment between PD content and instructional needs is not perceived as a major barrier. Teachers generally view existing PD activities as relevant to their classroom contexts, indicating that some programs already respond to practical teaching concerns.

This finding supports the importance of systematic needs assessment in PD planning. Studies by Avalos (2011), DiBenedetto et al. (2018), and Mpahla and Okeke (2015) showed that PD grounded in classroom needs increases relevance and transfer of learning, particularly in rural settings. Darling-Hammond et al. (2017) likewise found that PD aligned with instructional challenges is more likely to result in sustained classroom implementation. The low mean score suggests that teachers recognize the value of aligned PD, even though such alignment may not be consistently applied across all programs.

The next lowest mean score (M = 1.67) indicates that PD addressing day-to-day instructional concerns is perceived as only a fair barrier. Teachers appear to value short, focused training that targets immediate classroom needs, such as assessment strategies, classroom routines, and differentiated instruction. However, these opportunities may not occur with sufficient regularity or structure.

Previous studies by Quilapio and Callo (2022) and Butangen and Azarias (2024) found that PD addressing specific classroom tasks leads to higher satisfaction and faster application. Mpahla and Okeke (2015) further emphasized that in rural contexts, targeted and time-efficient PD is more feasible and more likely to be attended. The present findings suggest that while some PD activities address daily instructional needs, there is a need for more consistent, structured, and task-focused learning opportunities.

Overall, the results indicate that barriers related to teachers' needs are primarily associated with the relevance and practicality of professional development. Teachers value PD that is applied, contextualized, and responsive to classroom realities. When professional learning emphasizes practice, follow-up support, and needs-based design, its perceived usefulness and impact on instruction are likely to increase.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Table 3.5. **Barriers encountered by teachers related to internet access**

INDICATORS	MEAN	DESCRIPTIVE RATING
1. stable internet connectivity can increase participation in online PD sessions.	1.30	PB
2. lack of digital devices limits engagement in virtual training.	3.64	HB
3. some online training sessions require high-speed internet that is unavailable.	3.72	HB
4. faster internet access improves accessibility to online PD platforms.	1.30	FB
5. improved connectivity enhances interaction and engagement in virtual PD.	1.23	FB
WEIGHTED MEAN	**2.24**	**FB**

Legend. 3.51 - 4.00 - Highly Barrier (HB); 2.51 - 3.50 - Moderately Barrier (MB); 1.51 - 2.50 - Fairly Barrier (FB); 1.01 - 1.50 - Poorly Barrier (PB)

Internet-related constraints registered a weighted mean of 2.24, indicating a fair barrier overall. While the aggregate rating suggests moderate impact, the individual indicators reveal persistent challenges, particularly for teachers' participation in online professional development (PD).

As shown in Table 3.5, the highest mean score (M = 3.64) indicates that limited access to digital devices is a major constraint. This finding suggests that insufficient availability of functional devices restricts teachers' ability to participate effectively in online PD, particularly in attending live sessions, engaging with digital content, and completing required tasks. The high mean reflects a shared experience among teachers that inadequate hardware directly limits meaningful engagement in virtual learning environments.

This result confirms that access to digital devices is not simply a logistical concern but a fundamental prerequisite for online professional learning. Many teachers rely on personal devices—often low-capacity smartphones—that are poorly suited for video conferencing and interactive platforms. At the school level, limited ICT resources and competing MOOE priorities further restrict access to appropriate hardware. Consequently, teachers view device availability as one of the most serious barriers to online PD participation.

These findings are supported by Hébert et al. (2021), who reported that teachers without reliable digital devices face difficulties in accessing multimedia resources and participating in synchronous sessions. Ibda et al. (2023) likewise emphasized that limited access to hardware deepens digital inequities, particularly in rural and low-income contexts. Darling-Hammond et al. (2020) further argued that effective online PD requires devices capable of supporting videoconferencing and interactive learning tools. Opfer and Pedder (2011) similarly noted that access to digital tools is integral to teachers' learning systems, as disruptions in device availability negatively affect engagement and opportunities for instructional transfer.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

The second-highest mean score (M = 3.72) highlights bandwidth-intensive PD formats as a substantial barrier. This result indicates that online training requiring high data consumption limits participation due to unstable or insufficient internet connectivity, especially in rural and geographically isolated areas. Teachers often rely on mobile data connections or shared school Wi-Fi that cannot consistently support real-time video-based sessions.

This finding aligns with Xie et al. (2023), who reported that teachers in low-bandwidth areas frequently experience session interruptions and reduced learning quality. Hébert et al. (2021) likewise found that synchronous online PD disproportionately disadvantages rural teachers. Ibda et al. (2023) further noted that many PD programs assume high-speed connectivity, unintentionally excluding teachers from resource-constrained settings. Darling-Hammond et al. (2020) emphasized that PD designs that ignore infrastructure variability tend to reduce participation and engagement. Together, these studies explain why bandwidth-heavy formats remain a prominent barrier.

In contrast, the lowest mean score (M = 1.23) indicates that limited digital interactivity is perceived as a fair barrier. Teachers recognize that stronger connectivity enhances engagement but do not view reduced interactivity as a major obstacle. This suggests that many teachers do not rely heavily on real-time interactive formats and are accustomed to alternative modes of learning.

This interpretation is supported by Opfer and Pedder (2011), who argued that teacher learning can occur effectively through self-paced and reflective approaches. Ibda et al. (2023) similarly observed that teachers in developing contexts often engage in asynchronous PD due to infrastructural constraints. While Hébert et al. (2021) and Xie et al. (2023) noted that interactive formats can deepen learning, they also acknowledged that asynchronous models remain viable when connectivity is limited. These findings suggest that teachers' adaptation to low-interactivity formats reduces the perceived severity of this barrier.

The second-lowest mean score (M = 1.30) indicates that unstable internet connectivity, while recognized as important, is not perceived as a major constraint. This pattern suggests that teachers have developed coping strategies—such as accessing school-based internet, downloading materials during stable periods, or completing tasks asynchronously—that reduce the immediate impact of inconsistent connectivity.

Prior research supports this interpretation. Hébert et al. (2021) emphasized that stable connectivity facilitates smoother participation in synchronous learning, while Oker (2019) noted that connectivity stability affects access to digital resources and task completion. However, studies also show that teachers often adapt by relying on school ICT hubs, shared connections, or low-bandwidth platforms (Ibda et al., 2023; Xie et al., 2023). These adaptive practices likely explain why connectivity instability is perceived as manageable rather than prohibitive in Sofronio Española.

Similarly, teachers acknowledged that faster internet improves PD access, yet the low mean score (M = 1.30) indicates it is not viewed as a significant barrier. This suggests that current PD formats do not heavily depend on high-speed connectivity. Teachers appear accustomed to slow connections and employ

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

strategies such as advance downloading, off-peak access, or school-based connectivity to meet PD requirements.

This finding aligns with Oker (2019), who found that teachers can participate effectively in asynchronous PD using low-speed internet when content is lightweight and accessible. Ibda et al. (2023) likewise reported that teachers in rural settings adapt to bandwidth limitations through flexible access strategies. Hébert et al. (2021) further noted that when PD is text-based or asynchronous, internet speed has limited influence on learning outcomes. These findings explain why limited internet speed is viewed as a manageable constraint affecting convenience rather than access.

Overall, the results indicate that internet-related barriers reflect broader structural inequalities in ICT infrastructure, particularly in rural school settings. This pattern aligns with national and local evidence highlighting uneven digital access in Philippine schools (Hébert et al., 2021; Peñaflor & Illescas, 2023). Teachers in Sofronio Española, like those in other remote districts, continue to face challenges related to device availability and bandwidth limitations. Strengthening school-based ICT infrastructure, expanding access to shared connectivity hubs, and providing offline or low-bandwidth PD options may help address these constraints and support more equitable access to professional learning.

Table 4. **Relationship between teachers' demographic profile and their level of awareness of professional development programs**

Demographic Variable	Career Progression Programs		Special Programs		In-Service Training (INSET)	
	r12	Sig (2-tailed)	r12	Sig (2-tailed)	r12	Sig (2-tailed)
Age	-0.400	0.600	1.000**	0.000	0.400	0.600
Highest Educational Attainment	-0.400	0.600	1.000**	0.000	0.400	0.600
Years Of Teaching	-1.000**	0.000	1.000**	0.000	-0.500	0.667

**. Correlation is significant at the 0.01 level (2-tailed).

The results presented in Table 4 examine the relationship between teachers' demographic characteristics—age, highest educational attainment, and years of teaching experience—and their level of awareness of three types of professional development (PD): career progression programs, special programs, and in-service training (INSET). The findings reveal which demographic variables are associated with differences in awareness and which forms of professional development are communicated uniformly across the teaching population.

A weak, negative, and non-significant correlation was found between age and awareness of career progression programs ($r = –0.400$, $p = 0.600$). This result indicates that teachers' age does not meaningfully

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

influence their awareness of promotion systems, ranking guidelines, or competency requirements. Both younger and older teachers appear to receive comparable information regarding career advancement. The absence of a significant relationship suggests that career progression information is disseminated through standardized and formal communication channels that reach teachers regardless of age, such as official memoranda, orientations, and institutional briefings. As a result, age-specific interventions to improve awareness of career progression programs do not appear necessary.

This finding contrasts with Santos-Pallasigui (2019) and Booth et al. (2021), who reported age-related differences in engagement with career-oriented professional development. However, it aligns with Juma (2024), who noted that when information dissemination is institutionalized, age-related disparities in awareness tend to diminish.

In contrast, a perfect, positive, and significant relationship was observed between age and awareness of special professional development programs ($r = 1.000$, $p = 0.000$). This result indicates that awareness of scholarships, specialized training, and externally funded programs increases with age. Older teachers are likely to have greater exposure to such opportunities due to longer professional experience, repeated participation in development activities, and broader professional networks. Younger teachers, meanwhile, may prioritize instructional adjustment and classroom management, limiting their engagement with information related to specialized programs. This pattern highlights the need for structured orientation and mentoring systems to ensure that younger teachers are equally informed about available special professional development opportunities.

This finding is consistent with Nasution et al. (2024), Galeng (2024), and Osei-Owusu (2022), who emphasized that professional maturity and extended service increase teachers' access to and awareness of specialized learning opportunities.

With respect to INSET, the relationship between age and awareness was positive but not statistically significant ($r = 0.400$, $p = 0.600$). This suggests that age does not meaningfully differentiate teachers' awareness of school-based in-service training. Since INSET activities are scheduled regularly, formally announced, and conducted at the school level, teachers across all age groups receive similar exposure. Awareness of INSET therefore appears to be uniformly distributed, reinforcing its institutionalized and mandatory nature.

This result supports findings by Quilapio and Callo (2022), and Vaillant (2016), who described INSET as a standardized form of professional development implemented across entire school faculties.

The analysis further shows a weak, negative, and non-significant relationship between educational attainment and awareness of career progression programs ($r = –0.400$, $p = 0.600$). This indicates that teachers' academic qualifications do not significantly influence their understanding of promotion pathways or competency standards. Career-related information appears to be communicated uniformly, regardless of whether teachers hold bachelor's or graduate degrees. These findings suggest that strengthening communication strategies may be more effective than relying on academic qualifications to improve awareness of career advancement opportunities.

While this result contrasts with Galeng (2024) and Osei-Owusu (2022), who associated higher academic attainment with greater PD awareness, it aligns with Booth et al. (2021) and Cárdenas (2016), who emphasized the role of institutional support in shaping teacher awareness.

In contrast, a perfect, positive, and significant relationship was found between educational attainment and awareness of special PD programs ($r = 1.000$, $p = 0.000$). Teachers with higher academic qualifications demonstrated greater awareness of specialized learning opportunities. This relationship may be attributed to increased engagement in academic networks, research activities, and professional communities, which often serve as channels for information about advanced or specialized programs. Teachers with lower academic attainment may have more limited access to these networks, underscoring the importance of inclusive dissemination strategies.

This finding is supported by Garba (2024), Germanos and Longarezi (2019), and Kumar (2023), who noted that academic exposure enhances teachers' capacity to identify and pursue specialized professional development opportunities.

The relationship between educational attainment and awareness of INSET was positive but non-significant ($r = 0.400$, $p = 0.600$), indicating that academic qualifications do not meaningfully influence awareness of in-service training. As INSET is institutionally delivered and mandatory, information about these activities reaches teachers uniformly, regardless of educational background.

Similarly, years of teaching experience showed a perfect, negative, and significant correlation with awareness of career progression programs ($r = –1.000$, $p = 0.000$). This result indicates that less experienced teachers reported higher awareness of promotion pathways compared to more experienced teachers. Early-career teachers are often more actively engaged in orientation activities and promotion briefings, while veteran teachers may rely on prior knowledge or perceive fewer advancement opportunities. This finding highlights the need for sustained communication efforts to keep experienced teachers informed about updated promotion policies and competency standards.

This result aligns with Channa et al. (2024) and Juma (2024), who emphasized that ongoing communication is necessary to maintain awareness across all career stages.

Conversely, years of teaching experience showed a perfect, positive, and significant relationship with awareness of special professional development programs ($r = 1.000$, $p = 0.000$). Teachers with longer service demonstrated greater familiarity with specialized opportunities, likely due to cumulative exposure, repeated participation, and expanded professional networks. These findings suggest that early-career teachers may require additional support to access information about specialized programs.

Finally, the relationship between years of teaching experience and awareness of INSET was weak and non-significant ($r = –0.500$, $p = 0.667$). This indicates that awareness of INSET does not depend on length of service. Since INSET is mandatory and school-wide, teachers receive the same information regardless of experience level.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Overall, the results indicate distinct patterns across professional development types. Awareness of INSET is consistently distributed across all demographic groups due to its institutionalized and mandatory implementation. In contrast, awareness of special professional development programs is strongly influenced by age, educational attainment, and teaching experience, reflecting the role of professional networks and academic exposure. Awareness of career progression programs is primarily shaped by teaching experience rather than age or educational attainment, suggesting that institutional familiarity plays a key role in understanding promotion pathways.

Table 5. **Relationship between teachers' level of awareness and barriers to professional development**

Awareness Indicator	Workload Barrier		Funding Barrier		Transportation Barrier		Teachers Needs Barrier		Internet Barrier		Access
Career Progression Programs	-0.600	0.285	-0.700	0.188	0.500	0.391	-0.600	0.285	0.667	0.219	
Special Programs	0.100	0.873	0.200	0.747	0.600	0.285	0.100	0.873	0.051	0.935	
In-Service Training (INSET)	-0.200	0.747	0.100	0.873	0.500	0.391	-0.200	0.747	0.821	0.089	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5 shows that awareness of professional development (PD) programs does not consistently correspond with reduced barriers to participation. Across most indicators, correlations between awareness and barriers were weak or statistically non-significant, indicating that being informed about PD opportunities does not automatically lessen logistical, financial, or contextual constraints.

Awareness of career progression programs demonstrated weak negative correlations with workload ($r = –0.600$) and transportation ($r = –0.700$), suggesting that even teachers who are knowledgeable about promotion systems continue to experience time and mobility challenges. Similarly, the relationships between awareness of special programs and funding ($r = 0.200$) and between awareness of INSET and internet access ($r = 0.821$) were not statistically significant ($p > .05$), reinforcing the conclusion that awareness alone does not remove participation barriers.

The moderate negative correlation between awareness of career progression programs and workload ($r = –0.600$, $p = 0.285$) suggests a tendency for more informed teachers to perceive slightly fewer workload constraints. However, the lack of statistical significance indicates that workload pressures persist regardless of awareness. While informed teachers may be more intentional in planning time for career-related PD, structural workload demands—particularly in rural schools—remain largely unchanged.

This pattern is consistent with Avalos (2011), who found that understanding career pathways can support better time management, and with Darling-Hammond et al. (2017), who noted that clarity in professional pathways increases engagement. However, Opfer and Pedder (2011) emphasized that systemic

workload pressures often operate independently of teacher awareness. Rizka et al. (2024) further highlighted that multigrade teaching, administrative responsibilities, and staffing limitations in rural contexts continue to shape PD participation regardless of individual motivation.

A similar pattern appears in the relationship between awareness of career progression programs and funding barriers ($r = –0.700$, $p = 0.188$). While greater awareness may help some teachers identify available subsidies or stipends, the non-significant result suggests that financial constraints remain a common challenge. Funding limitations appear to be shaped more by institutional budgeting and policy than by individual awareness.

Khotimah et al. (2024) and Garba (2024) observed that teachers pursuing advancement often become more familiar with financial supports, yet Glover et al. (2016) and Ennes et al. (2021) emphasized that funding disparities are structural and affect teachers regardless of awareness. These findings suggest that awareness may provide marginal advantages in navigating resources but does not overcome systemic financial limitations.

In contrast, a positive but non-significant correlation ($r = 0.500$, $p = 0.391$) indicates that teachers with higher awareness of career progression programs tend to report greater transportation barriers. This may reflect heightened recognition of travel requirements once teachers seriously consider participation. However, the lack of statistical significance suggests that this pattern should be interpreted cautiously.

Studies by Mpahla and Okeke (2015) and Aparicio and Márquez (2020) similarly reported that teachers who actively pursue PD become more aware of logistical constraints, particularly in rural areas where training is centralized. Avalos (2011) cautioned that travel-dependent PD disproportionately affects rural teachers, regardless of motivation.

A weak negative association between awareness of career progression programs and perceived misalignment of PD with teachers' needs ($r = –0.600$, $p = 0.285$) suggests that informed teachers may view PD as slightly more relevant. However, this relationship was not statistically significant, indicating that alignment concerns persist even among knowledgeable teachers.

Avalos (2011) and Quilapio and Callo (2022) noted that PD linked to competency standards can increase perceived relevance, while Mpahla and Okeke (2015) and Tzotzou et al. (2024) emphasized that relevance is often undermined when PD remains theoretical. These findings suggest that awareness may improve perceptions marginally but does not guarantee practical alignment.

A positive but non-significant correlation between internet access and awareness of career progression programs ($r = 0.667$, $p = 0.219$) indicates that connectivity may support access to information, though it does not strongly determine awareness. Teachers with better connectivity may receive updates more easily, but reliance on digital dissemination alone risks excluding those in low-connectivity areas. Mixed communication strategies therefore remain essential.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Table 5 also shows near-zero correlations between workload and awareness of special programs (r = 0.100, p = 0.873), suggesting that awareness of special PD opportunities is largely independent of daily workload demands. This may be because special programs are often communicated through professional networks rather than internal school routines.

Nasution et al. (2024) and Galeng (2024) similarly emphasized that awareness of specialized PD is shaped more by professional exposure than by workload conditions.

A weak positive relationship between awareness of special programs and funding barriers (r = 0.200, p = 0.747) suggests that increased awareness may heighten recognition of associated costs. Teachers who are informed about special programs may also become more aware of registration fees, travel expenses, or documentation requirements. However, the relationship remains non-significant, indicating variability across program types.

Likewise, awareness of special programs showed a moderate but non-significant association with transportation barriers (r = 0.600, p = 0.285), suggesting that logistical demands become more visible once teachers consider participation. Prior studies (Mpahla & Okeke, 2015; Aparicio & Márquez, 2020) similarly noted that specialized programs often require travel, particularly for rural teachers.

Awareness of special programs was also unrelated to perceptions of PD relevance (r = 0.100, p = 0.873) and internet access (r = 0.051, p = 0.935), indicating that awareness is not strongly shaped by these factors. This supports arguments by Cárdenas (2016) and Osei-Owusu (2022) that professional networks, rather than connectivity, are the primary drivers of awareness.

For INSET, awareness showed weak or near-zero correlations with workload (r = –0.200, p = 0.747), funding (r = 0.100, p = 0.873), and alignment with teachers' needs (r = –0.200, p = 0.747). These findings reflect the institutionalized nature of INSET, which is school-based, scheduled, and communicated uniformly. As such, awareness is largely independent of personal constraints.

However, a moderate positive correlation between INSET awareness and transportation barriers (r = 0.500, p = 0.391) suggests that teachers who engage more actively with INSET may encounter travel demands related to cluster-based or division-level activities. Similarly, a strong but non-significant correlation between internet access and INSET awareness (r = 0.821, p = 0.089) indicates a potentially meaningful pattern that warrants further investigation with a larger sample.

Overall, the findings demonstrate that awareness alone is insufficient to remove participation barriers. When PD is institutionalized and predictable, as in the case of INSET, awareness is widespread and less sensitive to individual constraints. In contrast, awareness of externally provided or career-oriented PD interacts with funding, transportation, and connectivity, yet these barriers persist even among informed teachers.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Most correlations in Table 5 are not statistically significant ($p > .05$), underscoring the importance of interpreting effect sizes alongside sample size. Moderate to large correlation coefficients in small samples may indicate emerging patterns that require replication rather than definitive conclusions.

Taken together, the results highlight the need for a contextualized approach to professional development in rural settings. Improving infrastructure, ensuring transparent funding support, decentralizing delivery, and strengthening communication strategies are essential for translating awareness into meaningful participation. These findings directly inform the proposed Professional Development Plan, which prioritizes barrier reduction, flexible delivery, and locally responsive training for teachers in Sofronio Española and similar rural districts.

OUTPUT

Proposed Professional Development Plan for Elementary Teachers in Sofronio Española SY 2025-2026

Rationale

Professional development (PD) plays a critical role in strengthening teacher competence and improving instructional quality. In geographically isolated and resource-constrained districts such as Sofronio Española, assessment results indicate that teachers demonstrate only moderate awareness of professional development programs aligned with the National Educators Academy of the Philippines (NEAP) and the Philippine Professional Standards for Teachers (PPST). Moreover, gaps persist in the relevance, accessibility, and contextual responsiveness of available PD opportunities.

Teachers identified several constraints that limit participation, including heavy workload demands, transportation difficulties, limited digital access, and professional development activities that do not adequately reflect classroom realities. These barriers restrict meaningful engagement in professional learning and weaken the implementation of PPST and the Department of Education's Schools Governance Framework.

This Professional Development Plan (PDP) presents a structured and needs-responsive approach to enhancing teacher competencies while addressing systemic participation barriers. It proposes localized and context-sensitive strategies such as cluster-based in-service training (INSET), digital access support, mentoring systems, and strengthened administrative and logistical mechanisms. Anchored on empirical findings and teacher-identified needs, the PDP aims to improve instructional practice, promote equitable access to professional learning, and support sustained capacity development across the district.

Target Objectives

1. Increase teacher awareness of NEAP- and PPST-aligned professional development programs to at least 75% by the end of the second quarter of SY 2025–2026.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

2. Ensure that at least 75% of teachers rate PD programs as highly relevant to their instructional and contextual needs by the end of the fourth quarter of SY 2025–2026.
3. Reduce workload-related barriers to PD participation by 20% and increase PD completion rates to 75% by the end of the second quarter of SY 2025–2026.
4. Increase PD attendance to 90% and reduce transportation-related barriers by 30% through quarterly cluster-based sessions and coordinated logistical support during SY 2025–2026.
5. Improve digital access by ensuring that at least 70% of teachers utilize school-based learning hubs and by increasing participation in digital PD activities by 50% by the third quarter of SY 2025–2026.
6. Strengthen teachers' ICT and instructional competencies by improving ICT proficiency by 60% and increasing performance in PPST Domains 2 and 4 by 20% by the end of the fourth quarter of SY 2025–2026.
7. Enhance classroom application of learning by establishing at least 25 mentoring pairs and ensuring that 70% of mentees demonstrate improved instructional practices by the end of the second quarter of SY 2025–2026.
8. Institutionalize sustainability by integrating 100% of required PD provisions into the School Improvement Plan (SIP) and Annual Implementation Plan (AIP) and producing annual PD monitoring and evaluation reports

Description

The proposed PDP directly responds to assessment findings on teachers' professional development experiences in Sofronio Española. Moderate awareness of NEAP- and PPST-aligned programs underscores the need for improved information dissemination. To address this, the plan includes district-wide orientations, regular Learning Action Cell (LAC) updates, and the distribution of PD catalogues that clearly outline available programs and their alignment with national competency standards.

Concerns regarding PD relevance point to the need for contextualization. Teachers reported that many PD activities do not adequately address multigrade teaching conditions, limited instructional resources, and diverse learner profiles. The PDP introduces localized interventions such as community-based modules, differentiated instruction strategies, and contextualized learning material development to ensure applicability to real classroom settings.

Workload-related barriers remain a major deterrent to PD participation. The PDP schedules activities during non-peak periods and encourages school heads to streamline administrative requirements during PD implementation. To address transportation challenges in remote barangays, the plan adopts cluster-based INSET delivery, LGU-supported travel allowances, and school-organized shuttle arrangements.

Digital access limitations are addressed through the establishment of school-based learning hubs, provision of offline PD modules, and development of low-bandwidth training materials. These measures aim to ensure equitable participation in digital professional learning regardless of connectivity constraints.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

Teacher self-assessments also revealed gaps in ICT and administrative competencies. The PDP includes targeted ICT training, workshops on documentation and instructional resource development, and coaching aligned with PPST indicators. Peer mentoring and structured feedback mechanisms are incorporated to support classroom application and continuous instructional improvement.

To ensure sustainability, all PD initiatives will be embedded in the SIP and AIP. Alignment with Maintenance and Other Operating Expenses (MOOE) allocations, alongside partnerships with local government units and external institutions, will support long-term implementation beyond the initial plan period.

Summary

This Professional Development Plan adopts an evidence-based and context-sensitive approach to supporting elementary teachers in Sofronio Española. It outlines strategic interventions to improve teacher awareness, relevance, and access to professional development, particularly in relation to workload, transportation, and digital limitations. Mentoring systems, ICT capacity-building, and administrative support are aligned with PPST and NEAP frameworks. Through systematic monitoring and integration into school planning processes, the PDP promotes sustainability and continuous improvement. Ultimately, the plan seeks to strengthen teacher competence, enhance instructional quality, and improve learner outcomes across the district.

Proposed professional development plan for elementary teachers in Sofronio Española

Key Findings	**PD Objectives**	**Strategies / Interventions**	**Major Activities**	**Responsible Persons / Offices**	**Time Frame**	**Means of Verification**	**Success Indicators/ Expected Outputs**
Teachers have moderate awareness of NEAP-aligned PD programs.	By the end of the school year, at least 75% of teachers will demonstrate an increased level of awareness of PD programs aligned with the PPST and the NEAP.	Conduct district-wide PD orientation and information dissemination.	Orientation on NEAP & PPST; Distribution of PD catalogues; PD updates during LAC sessions.	District Supervisor, NEAP Coordinator, School Heads	1st–4th Quarter SY 2025–2026	Attendance sheets, evaluation forms, LAC documentation.	75% of teachers report increased awareness; 100% of schools conduct orientation.
Teachers perceive gaps in relevance and	Within six months, at least 75% of teachers will perceive PD	Implement needs-based, localized PD.	Conduct needs assessment; develop modules on multigrade	NEAP Coordinator, Master Teachers, School Heads	1st–3rd Quarter	Needs assessment report, post-evaluation	75% of teachers rate PD as highly relevant; at

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

alignment of PD to classroom needs.	activities as relevant and aligned with classroom needs.		teaching, contextualized materials, differentiated instruction.			surveys developed.	least 3 localized modules developed.
Teachers experience workload-related barriers that limit PD participation.	Within one school year, PD participation rates will increase by at least 20% through the implementation of workload-sensitive scheduling.	Integrate PD within school calendar; minimize admin load.	Schedule PD in non-peak months; reduce paperwork during PD week.	School Heads, District Supervisor	1st–4th Quarter SY 2025–2026	Attendance reports, survey comparison results	75% PD completion rate; 20% decrease in workload barrier reports.
Teachers face transportation difficulties in attending district-wide PD.	Within one school year, participation in district-wide PD activities will increase by at least 20% through the provision of accessible or alternative delivery options.	Conduct cluster-based PD; provide transport support.	Host cluster-based sessions; provide travel allowance or shuttle.	School Heads, District Office, LGU	1st–4th Quarter SY 2025–2026	Cluster attendance sheets, liquidation reports	90% teacher attendance; 30% reduction in transport issues.
Teachers have limited internet/digital access.	Within one school year, at least 70% of teachers will participate in PD using	Establish digital hubs; use offline PD modules.	Set up school learning hubs; provide low-bandwidth and offline materials.	ICT Coordinator, DepEd ICTS, LGU	1st–4th Quarter SY 2025–2026	Usage logs, ICT monitoring sheets	70% teacher hub usage; 50% increase in digital PD participation

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

	offline or low-bandwidth modalities.						
Teachers need support in administrative and 21st-century skills.	Within one school year, at least 60% of teachers will demonstrate improved competence in ICT, administrative documentation, and 21st-century teaching strategies.	Conduct ICT and admin skills training.	Workshops on ICT; documentation training; sessions on 21st-century pedagogy.	School Heads, Master Teachers, NEAP Trainers	1st–4th Quarter SY 2025–2026	Skills assessment, PPST reports	60% improvement in ICT skills; 20% improvement in PPST Domain 2 & 4.
Teachers require more practical, hands-on PD.	Within one school year, at least 70% of teachers will apply hands-on PD strategies in classroom practice.	Implement mentoring and peer-coaching programs.	Establish mentoring pairs; conduct observations with feedback; monthly LAC.	Master Teachers, School Heads	1st–4th Quarter SY 2025–2026	Coaching logs, LAC documentation, observation reports	10 mentoring pairs; 70% improve in classroom practice.
Teachers need sustained PD funding and support.	By the end of the implementation period, PD funding will increase by at least 80%, supporting a minimum of	Mobilize MOOE, partnerships, and external linkages.	Prioritize PD in SIP/AIP; coordinate with NGOs and LGUs.	School Heads, Division Office, LGU	1st–4th Quarter SY 2025–2026	SIP/AIP documents, financial reports	Approved PD budget; 80% SIP/AIP with PD funds.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

	three sustained PD activities.						
PD programs require sustainability.	By the end of the implementation period, at least 75% of PD programs will be guided by an approved sustainability plan.	Embed PD in SIP, AIP, and annual school operations.	Annual PD planning; include PD in school performance reviews.	Division Office, District Supervisor, School Heads	1st–4th Quarter SY 2025–2026	SIP/AIP documents, M&E reports	PD plan appears in all SIP/AIP; yearly M&E report completed.

CONCLUSIONS

Based on the findings discussed in Chapter III, the following conclusions are drawn:

1. Elementary teachers in Sofronio Española differ in terms of age, highest educational attainment, and years of teaching experience in rural schools, reflecting a diverse teaching population with varied professional backgrounds.
2. Teachers in the district demonstrate general awareness of professional development opportunities, including career progression programs, special programs, and in-service training (INSET). However, the level of awareness differs across program types.
3. Teachers encounter multiple barriers that limit participation in professional development activities. These barriers include workload demands, financial constraints, transportation difficulties, personal learning needs, and limited internet access.
4. Awareness of professional development opportunities alone does not reduce participation barriers. The absence of significant relationships between awareness and most identified barriers indicates that information dissemination, without corresponding logistical, technological, and financial support, is insufficient to promote meaningful engagement.
5. Effective professional development for rural teachers requires a localized and context-responsive framework. Addressing documented barriers through relevant content, adequate resources, systematic monitoring, and sustained institutional support is essential for successful implementation.

ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 3 (March 2026)

RECOMMENDATIONS

Based on the study's conclusions, the following recommendations are proposed for key stakeholders. These recommendations emphasize practical, context-appropriate strategies suited to rural school settings.

1. For the Department of Education (DepEd)

1.1. Design professional development programs tailored to rural teaching contexts, including training on multigrade instruction, differentiated teaching in resource-limited classrooms, low-bandwidth or offline blended learning strategies, and contextualized instructional material development.

1.2. Strengthen infrastructure and logistical support for professional development in rural areas by allocating funds for improved internet connectivity, establishing low-cost digital learning hubs, and partnering with service providers to offer subsidized data or connectivity solutions for remote communities.

1.3. Enhance monitoring and evaluation mechanisms to ensure that professional development programs remain relevant, responsive, and aligned with the instructional realities of rural schools.

2. For School Administrators

2.1 Schedule professional development activities strategically by conducting sessions during non-peak periods in the academic calendar and reducing administrative workload during PD implementation.

2.2 Organize cluster-based INSET sessions within or near school communities to minimize transportation challenges and improve teacher participation.

2.3 Strengthen peer mentoring and collegial support systems by encouraging experienced teachers to guide and assist less experienced colleagues in instructional improvement and professional development planning.

2.4. Allocate a portion of Maintenance and Other Operating Expenses (MOOE) to support teacher training, learning materials, and logistical needs related to professional development.

3. For Teachers

3.1 Actively engage in professional development programs that address contextual classroom challenges and enhance instructional competence, particularly in multigrade teaching, classroom management, and localized pedagogy.

3.2 Establish professional learning networks within and across schools to promote collaboration, shared problem-solving, and mutual support in professional growth.

3.3 Pursue continuing academic and professional learning opportunities, such as graduate studies, micro-credential programs, and specialized training, to broaden skills and strengthen professional awareness.

4. For Policymakers

4.1 Formulate and support policies that address rural constraints in professional development by prioritizing budget allocations for infrastructure improvement, digital resource access, and teacher support systems.

4.2 Integrate teacher professional development initiatives into broader rural development plans to promote sustained collaboration between local government units and the Department of Education.

5. For Future Researchers

5.1 Employ qualitative or mixed-method research designs to capture deeper insights into teachers' experiences, perceptions, and contextual challenges through interviews, focus group discussions, or classroom observations.

5.2 Conduct longitudinal studies to examine the long-term effects of professional development programs on teaching practices, learner outcomes, and teacher retention.

5.3 Improve data quality by ensuring respondent readiness prior to survey administration. Clear orientation on key concepts, questionnaire structure, and response procedures should be provided to minimize response errors and enhance validity.

5.4 Undertake comparative studies involving other rural districts within Palawan or similar regions to identify best practices and inform broader policy development for rural teacher professional development.

Addressing the professional development needs of elementary teachers in Sofronio Española requires more than information dissemination. It demands concrete logistical support, contextualized training, and sustained institutional commitment. By prioritizing multigrade instruction training, low-bandwidth and blended learning approaches, cluster-based INSET, mentoring systems, and practical ICT support, and by strengthening research rigor in future studies, DepEd, school leaders, policymakers, and researchers can collaboratively enhance teacher capacity, improve instructional quality, and promote more equitable learning opportunities for rural learners.

REFERENCES

Abdullah, M. H. S., & Hassan, N. M. (2024). Negative implications of workload among teachers: A systematic literature review. International Journal of Academic Research in Progressive Education and Development, 13(3). https://doi.org/10.6007/ijarped/v13-i3/22193

Admiraal, W., & Røberg, K. I. K. (2023). Teachers' job demands, resources, and job satisfaction: Satisfaction with school, career choice, and the teaching profession across career stages. Teaching and Teacher Education, 125, Article 104063. https://doi.org/10.1016/j.tate.2023.104063

Alba, M. J., & Gamozo, M. J. (2024). Correlates of elementary teachers' performance in delivering instruction in Narra, Palawan. Education Digest, 19(1), 6–15.

Allen, M. (Ed.). (2019). The SAGE encyclopedia of communication research methods. SAGE Publications.

Al-Mahdi, O. (2019). Action research and teachers' professional development: Examples and reflections. International Educational Research, 2(3), 37. https://doi.org/10.30560/ier.v2n3p37

Aparicio, M., & Márquez, G. (2020). Impacto de la infraestructura vial sobre la educación rural. Universidad del Pacífico. https://www.repositorio.up.edu.pe/handle/11354/2655

Arta, N. G. Y., Wendrizal, N. W., & Almeyda, N. A. (2024). Meningkatkan kompetensi guru Bahasa Indonesia melalui program pengembangan profesional. Perspektif: Jurnal Pendidikan dan Ilmu Bahasa, 2(3), 85–98. https://doi.org/10.59059/perspektif.v2i3.1457

Atiya, A. H. (2022). Influence of school infrastructure on implementation of competency-based curriculum in public primary schools in arid and semi-arid lands of Kenya: A case of Marsabit County (Master's thesis). University of Nairobi. https://erepository.uonbi.ac.ke/handle/11295/160283

Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. Teaching and Teacher Education, 27(1), 10–20. https://doi.org/10.1016/j.tate.2010.08.007

Barrett, N., Cowen, J., Toma, E., & Troske, S. (2015). Working with what they have: Professional development as a reform strategy in rural schools. Journal of Research in Rural Education, 30(10), 1–18.

Booth, J., Coldwell, M., Müller, L. M., Perry, E., & Zuccollo, J. (2021). Mid-career teachers: A mixed-methods scoping study of professional development, career progression, and retention. Education Sciences, 11(6), Article 299. https://doi.org/10.3390/educsci11060299

Butangen, C. C., & Azarias, R. A. (2024). Professional development needs of elementary teachers in Alilem District: Input for a localized framework in the implementation of faculty development. Ignatian

International Journal for Multidisciplinary Research, 2(4), 1273–1309. https://doi.org/10.5281/zenodo.11044556

Cansino, J. A. S., Maulad, R. U., Magbata, S. M., Alvarez, D. J. E., Excija, Z. O., & Kuwih, J. A. (2022). Teachers' experiences in the implementation of mother tongue-based multilingual education in indigenous learner-dominated schools in Southern Palawan, Philippines. Asian Journal of Education and Social Studies, 32(2), 33–45. https://doi.org/10.9734/ajess/2022/v32i230766

Cárdenas, S. (2016). Curriculum reform and twenty-first-century skills in Mexico: Are standards and teacher training material aligned? In F. M. Reimer & C. K. Chung (Eds.), Teaching and learning for the twenty-first century: Educational goals, policies, and curricula from six nations (pp. 141–175). Harvard University Press.

Channa, W. M., Almulla, M. O., Sahito, Z., Alismail, A. M., Nurlanovna, S. K., & Nisa, N. U. (2024). Professional competencies of English language teachers: A literature review. World Journal of English Language, 15(1), Article 479. https://doi.org/10.5430/wjel.v15n1p479

Coker, H. (2019). Mediating the flow of professional capital: The potential of technology for rural teachers' professional learning in Scotland. Australian and International Journal of Rural Education, 29(3), 39–55. https://doi.org/10.47381/aijre.v29i3.234

Creswell, J. W., & Creswell, J. D. (2023). Research design: Qualitative, quantitative, and mixed methods approaches (6th ed.). SAGE Publications.

Dancey, C. P., & Reidy, J. (2007). Statistics without maths for psychology: Using SPSS for Windows. Pearson Education.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute. https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report

Department of Education. (2021). DepEd launches the professional development program on assessment and emerging literacies with focus on PISA. https://www.deped.gov.ph

DiBenedetto, C. A., Willis, V. C., & Barrick, R. K. (2018). Needs assessments for school-based agricultural education teachers: A review of literature. Journal of Agricultural Education, 59(4), 52–71. https://doi.org/10.5032/jae.2018.04052

Diliberti, M. K., Kaufman, J. H., Barron, J. L., & Hunter, G. P. (2020). Teachers' perspectives on professional development: Results from the American instructional resources survey (RAND Report No. RR-A148-2). RAND Corporation. https://www.rand.org/pubs/research_reports/RRA148-2.html

Dulo, A. A. (2022). In-service teachers' professional development and instructional quality in secondary schools in Gedeo Zone, Ethiopia. Social Sciences & Humanities Open, 5(1), Article 100252. https://doi.org/10.1016/j.ssaho.2022.100252

Ennes, M., Lawson, D. F., Stevenson, K. T., Peterson, M. N., & Jones, M. G. (2021). It's about time: Perceived barriers to in-service teacher climate change professional development. Environmental Education Research, 27(5), 762–778. https://doi.org/10.1080/13504622.2021.1909708

Eroğlu, M., & Dönmüş Kaya, V. (2021). Professional development barriers of teachers: A qualitative study. International Journal of Curriculum and Instruction, 13(2), 1896–1922.

Esparagoza, C. J. T., Asumo, J. R. L., & Estelloso, E. S. (2024). Understanding the link between INSET attendance and teaching efficiency of high school teachers. International Journal for Multidisciplinary Research, 6(2). https://doi.org/10.36948/ijfmr.2024.v06i02.15951 (doi.org in Bing) Galeng, R. R. (2024). Strategies for supporting teachers' professional development and retention in Parayao Centro Elementary School. American Journal of Education and Technology, 3(4), 45–50. https://doi.org/10.54536/ajet.v3i4.3620

Garba, A. (2024). The effect of professional development programs on improving teaching performance among Arabic teachers in Nigeria. Indonesian Journal of Pedagogy and Teacher Education, 2(3), 82–88. https://doi.org/10.58723/ijopate.v2i3.288

Germanos, E., & Longarezi, A. M. (2019). On "becoming-aware" as a key component of teachers' professional development. Obutchénie: Revista de Didática e Psicologia Pedagógica. https://doi.org/10.14393/obv3n3.a2019-52097

Glover, T. A., Nugent, G. C., Chumney, F. L., Ihlo, T., Shapiro, E. S., Guard, K., Koziol, N., & Bovaird, J. (2016). Investigating rural teachers' professional development, instructional knowledge, and classroom practice. Journal of Research in Rural Education, 31(3), 1–16.

Gong, M. (2013). New research on the problems and countermeasures of rural teachers' professional development: A study based on primary school teachers in County A of Shanxi Province. Journal of Educational Development. https://doi.org/10.3969/j.issn.1674-831x.2013.03.009

Govender, S., Ajani, O. A., Ndaba, N. H., & Ngema, T. (2023). Making in-service professional development effective in a rural context. In Rural education and teacher development (pp. 78–95). Brill. https://doi.org/10.1163/9789004547025_006

Hall, G. E. (1974). The concerns-based adoption model: A developmental conceptualization of the adoption process within educational institutions (ERIC Document No. ED111791). ERIC. https://eric.ed.gov/?id=ED111791

Harris, A., & De Bruin, L. R. (2018). Secondary school creativity, teacher practice and STEAM education: An international study. Journal of Educational Change, 19(2), 153–179. https://doi.org/10.1007/s10833-017-9311-2

Hébert, C., Jenson, J., & Terzopoulos, T. (2021). Access to technology is the major challenge: Teacher perspectives on barriers to digital game-based learning in K–12 classrooms. E-Learning and Digital Media, 18(3), 307–324. https://doi.org/10.1177/2042753021995315

Ibda, H., Syamsi, I., & Rukiyati, R. (2023). Professional elementary teachers in the digital era: A systematic literature review. International Journal of Evaluation and Research in Education, 12(1), 459–468. https://doi.org/10.11591/ijere.v12i1.23565

Juma, A. A. (2024). Enhancing teacher professional development: Strategies, challenges, and impacts on instructional practice and student learning outcomes: A review of research literature. International Journal for Research in Applied Science and Engineering Technology, 12(4), 450–457. https://doi.org/10.22214/ijraset.2024.59655

Khotimah, K., Nusantara, T., & Mashfufah, A. (2024). Tantangan membelajarkan materi ilmu pengetahuan sosial (IPS) di sekolah dasar: A systematic literature review. Sekolah Dasar: Kajian Teori dan Praktik Pendidikan, 33(1), 73–81. https://doi.org/10.17977/um009v33i12024p73-81

Khoza, D. S. (2019). Exploring business studies teachers' experiences of learning through professional learning communities in the context of curriculum changes: A case of five schools in the Pinetown district. [Master's thesis, University of KwaZulu-Natal]. University of KwaZulu-Natal ResearchSpace. https://researchspace.ukzn.ac.za/handle/10413/17849

Knowles, M. S. (1984). Andragogy in action: Applying modern principles of adult learning. San Francisco, CA: Jossey-Bass.

Koniushenko, S. M., & Komissarova, M. O. (2025). Vliianie programmy povysheniia kvalifikatsii pedagogov na kachestvo prepodavaniia. In Publishing House Sreda (pp. 39–49). https://doi.org/10.31483/r-115422

Krille, C. (2020). Individual and context characteristics related to teachers' professional development behavior. In SpringerBriefs in Education (pp. 41–90). Springer. https://doi.org/10.1007/978-3-030-38844-7_5

Kumar, K. S. (2023). Teacher training and professional development in special education: Assessing the impact of professional development programs on teacher effectiveness and student outcomes. Global International Research Thoughts, 11(1), 47–52. https://doi.org/10.36676/girt.2023-v11i1-010

Lagawid, E. L. (2024). Overloading in elementary school teachers: A review. Cognizance Journal of Multidisciplinary Studies, 4(11), 289–299. https://doi.org/10.47760/cognizance.2024.v04i11.016

Liao, W., Liu, M., Wang, Z., & Qin, K. (2022). Chinese expert teachers' critical thinking strategies for professional growth. Professional Development in Education, 50(6), 1089–1103. https://doi.org/10.1080/19415257.2022.2097290

Mpahla, N., & Okeke, C. (2015). The rurality of continuing professional teacher development (CPTD). Studies of Tribes and Tribals, 13(1), 22–33. https://doi.org/10.1080/0972639X.2015.11886708

Nasution, S. D. K., Madhakomala, R., Rugaiyah, R., & Dany, A. (2024). Professional development effectiveness from a teacher performance perspective: A review of literature across countries. Al-Fikrah: Jurnal Manajemen Pendidikan, 12(1), 64–73. https://doi.org/10.31958/jaf.v12i1.8737

No, J. G., Abdurakman, S. N. U., Robles, K. G. A., Etom, N. C., Ombao, C. J., & Arawe, E. M. (2022). Expectations and lived experiences of newly hired teachers in public elementary schools of Bataraza, Palawan, Philippines. Asian Journal of Education and Social Studies, 32(3), 33–44. https://doi.org/10.9734/ajess/2022/v32i330772
Nasution, S. D. K., Madhakomala, R., Rugaiyah, R., & Dany, A. (2024). Professional development effectiveness from a teacher performance perspective: A review of literature across countries. Al-Fikrah: Jurnal Manajemen Pendidikan, 12(1), 64–73. https://doi.org/10.31958/jaf.v12i1.8737

No, J. G., Abdurakman, S. N. U., Robles, K. G. A., Etom, N. C., Ombao, C. J., & Arawe, E. M. (2022). Expectations and lived experiences of newly hired teachers in public elementary schools of Bataraza, Palawan, Philippines. Asian Journal of Education and Social Studies, 32(3), 33–44. https://doi.org/10.9734/ajess/2022/v32i330772

Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. Review of Educational Research, 81(3), 376–407. https://doi.org/10.3102/0034654311413609

Osei-Owusu, B. (2022). Impact of professional development programmes on teachers' knowledge and academic performance of senior high school students in Ghana. European Journal of Education and Pedagogy, 3(2), 60–69. https://doi.org/10.24018/ejedu.2022.3.2.276

Perez, D., & Lumaad, R. (2021). Educational leadership and management styles of public elementary school heads and level of school-based management of selected schools in Palawan, Philippines. European Journal of Humanities and Educational Advancements, 2(1), 35–50.

Peñaflor, G. S., & Illescas, C. M. (2023). Blended learning modality in selected island elementary schools of Northern Palawan, Philippines. Zenodo. https://doi.org/10.5281/zenodo.8013551

Phetla, D., & Newman, W. (2020). Effectiveness of teacher professional development programmes: A literature review. Journal of Entrepreneurship Education, 23(2). Retrieved from https://www.abacademies.org/articles/Effectiveness-of-Teacher-Professional-1528-2651-23-S2-680.pdf

Popova, A., Evans, D. K., Breeding, M. E., & Arancibia, V. (2021). Teacher professional development around the world: The gap between evidence and practice. The World Bank Research Observer, 37(1), 107–136. https://doi.org/10.1093/wbro/lkab006

Qaisra, R., & Haider, S. Z. (2023). The influence of in-service teachers' training programs on the professional development of school teachers. Pakistan Journal of Humanities and Social Sciences, 11(1), 507–516. https://doi.org/10.52131/pjhss.2023.1101.0368

Qaisra, R., & Haider, S. Z. (2024). A study of professional development and in-service teacher training programs at school level in the Punjab. Pakistan Journal of Humanities and Social Sciences, 12(2). https://doi.org/10.52131/pjhss.2024.v12i2.2273

Quilapio, M. P., & Callo, E. C. (2022). The effect of in-service training programs on the professional development of public elementary school teachers. International Journal of Research Publications, 107(1), Article 3799. https://doi.org/10.47119/ijrp1001071820223799

Rizka, A. F., Nurhattati, N., & Kamaludin, K. (2024). Pengaruh lingkungan kerja dan beban kerja terhadap stres kerja guru: Sebuah kajian literatur review. Journal on Education, 7(2), 8796–8803. https://doi.org/10.31004/joe.v7i2.7776

Rodríguez, L. F. de la V. (2021). Investigación sobre enseñanza y desarrollo profesional docente en escuelas rurales: Una revisión. Revista de Estudios y Experiencias en Educación, 20(43), 307–325. https://doi.org/10.21703/REXE.20212043DELAVEGA16

S, R., & Bhaskar, R. (2022). Rural community teachers' awareness and attitude on learning challenges. Journal of Extension Education, 34(4), 6920–6931. https://doi.org/10.26725/jee.2022.4.34.6920-6931

Şahin, A., Soylu, D., & Jafari, M. B. (2024). Professional development needs of teachers in rural schools. Iranian Journal of Educational Sociology, 7(1), 219–225. http://dx.doi.org/10.61838/kman.ijes.7.1.22

Santos-Pallasigui, M. A. (2019). Teachers' organizational engagement and challenges among public elementary schools: Input for professional development program. International Journal of Advance Research and Innovative Ideas in Education, 5(3), 918–926. Retrieved from http://ijariie.com/FormDetails.aspx?MenuScriptId=149205

Schwartz, S. (2023). Teacher professional development, explained. EdWeek. Retrieved from https://www.edweek.org

Sovacool, B. K., Kim, J., & Yang, M. (2021). The hidden costs of energy and mobility: A global meta-analysis and research synthesis of electricity and transport externalities. Energy Research & Social Science, 72, 101885. https://doi.org/10.1016/j.erss.2020.101885

Suhandoko, A. D. J., Rahayu, U., Aisyah, S., Andayani, A., & Mikaresti, P. (2024). Teaching and learning international survey (TALIS) 2018: A descriptive analysis of teacher professional development (TPD) in

Indonesia. Jurnal Kependidikan Islam, 14(2), 142–159. Tantawy, N. (2020). Investigating teachers' perceptions of the influence of professional development on teachers' performance and career progression. Arab World English Journal, 11(1), 181–194. https://doi.org/10.24093/awej/vol11no1.15

Tzotzou, M., Poulou, M., Karalis, T., & Ifanti, A. (2024). Reflection as an INSET tool for teachers' professional development in the 21st century: A quantitative study. European Journal of Education Studies, 11(8). https://doi.org/10.46827/ejes.v11i8.5452

Vaillant, D. (2016). El fortalecimiento del desarrollo profesional docente: Una mirada desde Latinoamérica / Strengthening teaching professional development: A view from Latin America. Journal of Supranational Policies of Education (JOSPOE), 5, 5–21. https://doi.org/10.15366/jospoe2016.5.001

Villaruz, M. G. M., Cabahug, J. F., Miranda, F. S., Badua, J. L. C., & De La Cruz, J. A. (n.d.). Employability of the bachelor of elementary education graduates of Palawan State University–College of Community Resources Development, Brooke's Point: An assessment of effectiveness and relevance [Unpublished undergraduate thesis]. Palawan State University. UNESCO. (2024). Global report on teachers: What you need to know. Retrieved from https://www.unesco.org

Xie, K., Nelson, M. J., Cheng, S., & Jiang, Z. (2023). Examining changes in teachers' perceptions of external and internal barriers in their integration of educational digital resources in K–12 classrooms. Journal of Research on Technology in Education, 55(2), 281–306. https://doi.org/10.1080/15391523.2021.1951404

Yi, Z., Asyik, N. F., & Al-Hosaini, F. F. (2024). Teacher professional development in rural China: Opportunities and barriers. Global Social Science and Humanities Journal, 1(3), 1–18. https://doi.org/10.59088/gi.v1i3.13