

Continuous Professional Development and Teachers Effectiveness of Public Elementary Schools

Donna Lea C. Sabillo

Abstract. The study aimed to determine the extent of Continuous Professional Development (CPD) and the level of teachers' effectiveness in the K to 12 Curriculum of public elementary schools in San Roque District. Specifically, it examined how CPD contributes to enhancing teachers' instructional performance and overall effectiveness in the teaching-learning process. This study employed a non-experimental quantitative research design using a descriptive-correlational method. Data were collected through a validated questionnaire administered using a universal sampling technique due to the relatively small number of teachers in the research locale. A total of 120 public elementary school teachers participated as respondents. Statistical tools such as mean, Pearson's r , and regression analysis were used to determine the extent of variables, relationships, and significant influences. The findings revealed that Continuous Professional Development among teachers was extensive, indicating a high level of participation in training, seminars, and professional learning activities. Likewise, teachers' effectiveness in implementing the K to 12 Curriculum was also found to be extensive, reflecting strong instructional delivery and classroom performance. Furthermore, the results showed a significant positive relationship between CPD and teachers' effectiveness, suggesting that increased professional development is associated with improved teaching performance. Regression analysis identified improved job satisfaction, enhanced teaching competence, and increased career advancement as significant factors influencing teachers' effectiveness. Based on the findings, it is recommended that the Department of Education ensure sustained support, clear policies, and accessible CPD programs for teachers. School heads are also encouraged to strengthen the implementation of relevant, needs-based professional development initiatives to further enhance teachers' effectiveness in delivering quality education.

KEY WORDS

1. continuous professional development 2. teachers effectiveness 3. Career

Advancement

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1. Introduction

Continuous professional development quality of teaching greatly influences learners' (CPD) is essential in helping teachers effectively implement the K to 12 curriculum, as the achievement and the success of the curriculum. In the context of Philippine basic education, the

K to 12 program requires teachers to develop higher-order thinking skills among learners, use learner-centered teaching approaches, and integrate 21st century competencies in instruction. To respond to these demands, CPD offers opportunities for teachers to gain updated knowledge, explore innovative teaching strategies, and apply approaches that are aligned with the curriculum. Through active participation in in-service trainings, Learning Action Cells (LAC), seminars, and other professional development activities, teachers can improve their instructional practices, classroom management, and assessment methods. As a result, they become more effective educators and are better able to provide meaningful and high-quality learning experiences for their students.

The continuous professional development (CPD) of teachers in relation to their effectiveness in implementing the K to 12 curriculum provides meaningful benefits to various stakeholders in the Philippine education system. For teachers, CPD plays a crucial role in strengthening

their instructional competence, adaptability, and confidence in addressing the demands of the K to 12 curriculum. Recent studies emphasize that well-designed and needs-based professional development enhances teachers' classroom practices and overall effectiveness, ultimately improving the quality of instruction (Montefrio-Farrol, 2026).

School heads and administrators also benefit from such initiatives, as findings from CPD-related research can guide them in designing responsive and targeted training programs that address specific instructional gaps and professional needs. In the Philippine context, aligning CPD with frameworks such as the Philippine Professional Standards for Teachers (PPST) ensures that development programs remain relevant, structured, and responsive to evolving educational demands (Mantos et al., 2025).

Most importantly, learners gain indirect so

far significant advantages from teachers' continuous professional growth. When teachers are equipped with updated pedagogical knowledge and innovative strategies, they are better able to create engaging, learner-centered environments that support higher-order thinking and improved academic performance. Globally, evidence from systematic reviews also highlights that sustained CPD contributes to better teaching quality and more meaningful learning outcomes (Merino et al. 2025).

From the international perspective, continuous professional development (CPD) has strong and consistent links to improved teacher

effectiveness when programs are sustained, content-focused, and practice-embedded. Recent systematic reviews show that one-off workshops rarely produce lasting change; instead, PD that emphasizes subject/content focus, active learning (teachers practicing new strategies), coherence with curriculum goals, collective participation (peer collaboration), and ongoing coaching or mentorship yields the biggest gains in classroom practice and teacher confidence. These features are repeatedly highlighted in global syntheses of the literature as the critical design elements that translate CPD into observable changes in teaching behavior (Amemasor et al., 2025).

Dong et al., (2025), analytic evidence finds small-to-medium (and in some domain-specific meta-analyses, medium-to-large) effects of PD on teacher knowledge, instructional practice, and less consistently but still positively on learner outcomes. For example, recent meta-analyses of STEM and computer-science PD report meaningful effect sizes for teachers' content knowledge, self-efficacy, and teaching practice (with Hedges' values in the moderate range), particularly when PD includes follow-up support and classroom-embedded activities rather than brief training alone. Online and blended CPD formats can be effective (yielding medium effects on teacher outcomes), but

effectiveness again depends on whether online experiences incorporate active learning, feedback, and sustained peer support.

Continuous professional development (CPD) for K-12 teachers consistently improves teacher knowledge, instructional practice, and when

CPD is sustained, content-focused, and job-embedded can produce measurable gains in learner learning; recent global syntheses show the largest effects occur when PD includes active learning, ongoing coaching or mentorship, and alignment with curriculum and school support systems (Fütterer et al., 2025).

Recent studies highlight how CPD can improve teacher engagement, confidence, and instructional practices when it is well structured, context-relevant, and supported. One such study in Nkundabakura et al., (2025) explored how a CPD program aimed at female lower-secondary school teachers in mathematics and science significantly improved their self-efficacy, engagement, and performance

In the Philippine context, Ancho and Arrieta (2021) continuous professional development (CPD) has become central to efforts to improve teacher effectiveness under the K-12 curriculum, especially since the Department of Education (DepEd) adopted the Philippine Professional Standards for Teachers (PPST) as the national framework for teacher quality. Recent policy moves including DepEd guidance and the push to accredit Division Offices and DepEd units as CPD providers signal an effort to institutionalize CPD so that it aligns with PPST domains (content knowledge and pedagogy, curriculum and planning, assessment, professional engagement). These policy developments aim to move CPD from one-off workshops toward structured, recognized programs that count toward teacher professional advancement.

Gonzaga (2024) empirical studies from the Philippines point to mixed but informative results: teachers generally view CPD as valu-

able for upgrading content knowledge, pedagogical skills, and technology integration, yet participation and impact vary with access to resources, local leadership support, and the design of PD activities. Descriptive and evaluative studies from regions such as Iloilo and broader national inquiries report that opportunities, attitudes, and engagement in CPD differ by locality and teacher qualification and that online/blended CPD introduced during the pandemic increased reach but revealed challenges (connectivity, practical classroom coaching, and follow-up support) that limit how much instructional practice changes. In short, Filipino research echoes global findings: sustained, job-embedded, and curriculum-aligned CPD (with coaching/peer collaboration) shows the greatest promise for improving classroom practice.

Dayagbil and Alda (2024). emphasize integrating PPST into CPD content, strengthening school leadership and mentoring, addressing inequities in online access, and building Division-level capacity to deliver accredited, context-responsive CPD recommendations that DepEd implementation memos and recent academic papers explicitly support. These directions set the research and policy agenda for proving how CPD can meaningfully raise teacher effectiveness across the K-12 system in the Philippines.

Despite the strong emphasis on continuous professional development (CPD) in San Roque District, Davao City, there remains a concern about how effectively these initiatives translate into improved teaching practices under the K to 12 Curriculum. While programs such as Learning Action Cells (LACs), in-service trainings, and subject-specific workshops are actively implemented, many teachers still encounter practical challenges that limit their full participation. Heavy workloads, limited instructional resources, and insufficient time often make it difficult for teachers to engage deeply in professional learning. In addition, the increasing demand for technology integration presents an-

other layer of difficulty, especially for those with limited access to reliable internet and digital tools. These realities raise an important problem: whether existing CPD programs are truly responsive to teachers' needs and capable of enhancing their effectiveness in actual classroom settings.

Furthermore, there is a noticeable gap in research focusing on the localized and contextual realities of CPD implementation in San Roque District. While previous studies highlight the general benefits of CPD, they often overlook how these programs function in specific districts

where constraints such as resource limitations and technological challenges are evident. There is also limited evidence examining how well CPD initiatives are aligned with the Philippine Professional Standards for Teachers (PPST) in practice, and whether such alignment leads to measurable improvements in teaching effectiveness. This gap underscores the need for

a more context-based investigation that not only evaluates CPD participation but also examines its relevance, accessibility, and actual impact on teachers' day-to-day instructional practices.

2. Methodology

This chapter discusses the research methods, which give direction in this investigation. It includes the research design, research respondents of the study, research instrument and the data gathering procedures.

2.1. Research Design—This study adopted a non-experimental quantitative research design utilizing the descriptive-correlational method to explore the relationship between the impact of continuous professional development vis-a-vis teachers' effectiveness in the K to 12 curriculum of public elementary schools in San Roque District, Division of Davao City. According to Delos Santos et al. (2024), the descriptive-correlational method was commonly used when the goal was to determine the degree of association between two or more variables without manipulating them. It was particularly suitable when the variables under investigation naturally occurred and were not subject to experimental control. In support of this, Romorosa and Uchang (2025) emphasized that this method allowed researchers to describe existing conditions and explain the patterns that emerged from the data.

In light of this, the descriptive aspect of the study aimed to focus on enhancing educators'

knowledge, skills, and pedagogical practices to meet the demands of competency-based education. Continuous professional

development (CPD) sought to align instructional strategies, assessment methods, and classroom management approaches with the standards and learning outcomes prescribed by the K to 12 framework. It also promoted lifelong learning, reflective practice, and adaptability among teachers, enabling them to respond effectively to diverse learner needs and emerging educational trends. By translating CPD-acquired skills into daily teaching practices, educators were able to improve learner engagement, foster mastery of essential competencies, and develop 21st-century skills such as critical thinking, collaboration, and creativity.

2.2. Sources of Data—The study on Continuous Professional Development (CPD) and teachers' effectiveness in the K to 12 Curriculum of public elementary schools in San Roque District utilized both primary and secondary sources of data. The primary data were gathered from public elementary school teachers in the district, who served as the respondents and provided firsthand information on their experiences with CPD activities and their effectiveness in

instructional delivery, classroom management, and assessment of literacy. A validated questionnaire was used to collect their responses in a structured manner. Meanwhile, secondary data were obtained from related literature, research studies, academic journals, and online educational resources to support the theoretical framework of the study. In addition, official documents, policies, and reports from the

Department of Education (DepEd) were reviewed to provide context on CPD programs and the implementation of the K to 12 Curriculum.

2.3. Research Instrument—The data-gathering instruments used in the study were survey questionnaires. The questionnaire on Continuous Professional Development was patterned from the studies of Guskey (2002) and Desimone (2009), while the questionnaire on Teacher Effectiveness was patterned from the study of Camaral and Sumaylo (2025). The questionnaires were modified by the researcher to align with the objectives and context of the study.

To ensure validity, the adapted instruments were subjected to expert validation by specialists from Rizal Memorial Colleges. Their comments, corrections, and suggestions were incorporated to improve the clarity, relevance, and appropriateness of the items. The questionnaires were likewise presented to the research adviser for further review and refinement.

After the validation process, pilot testing was conducted in selected public elementary schools that were not included in the actual study. The researcher personally administered the questionnaires to the pilot respondents to ensure proper orientation and accurate responses. During the pilot testing, respondents were asked to answer the questionnaire and provide feedback regarding unclear terms, ambiguous statements, and the

overall comprehensibility of the instrument. The responses gathered from the pilot test were

collected, encoded, and forwarded to a data analyst for reliability testing using Cronbach's alpha. The instrument obtained a Cronbach's alpha value of 0.791, interpreted as "acceptable," indicating that the questionnaire had satisfactory internal consistency and reliability. The questionnaire consisted of two parts: Continuous Professional Development and Teacher Effectiveness in the K to 12 curriculum of public elementary schools. Hence, the obtained reliability value confirmed that the measures used in the study were consistent and appropriate for data

gathering.

Part 1 of the questionnaire focused on continuous professional development and teachers' effectiveness in K to 12 curriculum, specifically in three key areas: improved job satisfaction, enhanced teaching competence, and increased career advancement. Improved job satisfaction in CPD aimed to motivate teachers to remain committed, productive, and engaged in their profession, thereby enhancing teaching quality and fostering a positive learning environment for learners. The function of enhanced teaching competence in CPD was to equip teachers with updated knowledge, innovative strategies, and effective skills that improved instructional delivery, resulting in better learner outcomes and overall educational quality.

Lastly, the function of increased career advancement in CPD was to provide teachers with the qualifications, expertise, and professional recognition needed to access higher positions, leadership roles, and broader opportunities within the education sector.

Part 2 of the questionnaire focused on teachers' effectiveness in K to 12 curriculum, highlighting three key dimensions: instructional quality, classroom management, and assessment literacy. The aim of teachers' effectiveness in K to 12 curriculum in public schools was to ensure the delivery of high-quality, learner-centered instruction that fostered critical thinking, life-

long learning skills, and holistic development, enabling learners to meet the curriculum’s standards and become globally competitive. The perceptions of the respondents among the San Roque District teachers were based on the following five-point Likert rating scales:

Scale for Part I: Continuous Professional Development

Range	Descriptive Equivalent	Interpretation
4.20-5.00	Very Extensive	Continuous professional development is always evident.
3.40-4.19	Extensive	Continuous professional development is oftentimes evident.
2.60-3.39	Moderately Extensive	Continuous professional development is sometimes evident.
1.80-2.59	Less Extensive	Continuous professional development is rarely evident.
1.00-1.79	Not Extensive	Continuous professional development is not evident.

Scale for Part II: Teachers’ Effectiveness in K to 12 Curriculum

Range	Descriptive Equivalent	Interpretation
4.20-5.00	Very Extensive	Teachers’ effectiveness in K to 12 curriculum is always evident.
3.40-4.19	Extensive	Teachers’ effectiveness in K to 12 curriculum is oftentimes evident.
2.60-3.39	Moderately Extensive	Teachers’ effectiveness in K to 12 curriculum is sometimes evident.
1.80-2.59	Less Extensive	Teachers’ effectiveness in K to 12 curriculum is rarely evident.
1.00-1.79	Not Extensive	Teachers’ effectiveness in K to 12 curriculum is not evident.

2.4. Research Respondents and Sampling Technique—This study employed a probability sampling technique, using Slovin’s formula to determine the appropriate number of respondents from the total population of Grade 5 to 6 public elementary school teachers in San Roque District, Division of Davao City. The participants were specifically those with three to six years of teaching experience in the Department of Education (DepEd) during School Year 2024–2025. From a total population of 171 teachers, a sample of 120 respondents was obtained using a 5% margin of error.

This approach allowed the researcher to select a sample that was sufficiently representative of the population while remaining practical for data collection. The teachers who participated in the study provided

meaningful insights and shared their experiences, particularly in relation to leadership practices and curriculum implementation. These contributions added depth to the data gathered and helped strengthen the overall credibility of

the study’s findings.

2.5. Data Gathering Procedure—Permission to conduct study. The data-gathering procedure began with the researcher securing the necessary permission to conduct the study from the appropriate authorities through formal and proper channels, ensuring full compliance with institutional requirements. On November 8, 2025, (see Appendix A, p.91) endorsement was first obtained from the Dean of the Graduate School, signifying institutional support for the conduct of the research. Prior to this, on October 29, 2025 (see Appendix I, p. 106), the study had already been evaluated by the RMC Research Ethics Committee as part of the initial review process.

Subsequently, approval was granted by the Schools Division Superintendent on November 14, 2025 (see Appendix B, p. 92), allowing the study to proceed to the next stage. The final approval was issued by the Public Schools District Supervisor (PSDS) of San Roque District, who authorized the distribution of survey question-

naires to the identified schools. With all necessary permissions duly secured, the researcher proceeded with data collection in accordance with established protocols and ethical standards. *Distribution and retrieval of questionnaires.* On November 17, 2025 (see Appendix, p. 94), the researcher personally distributed printed copies of the questionnaires to the selected respondents. Clear and straightforward instructions were provided to guide them in accomplishing the forms accurately and with ease. After completion, the questionnaires were retrieved through a coordinated collection of the printed copies to ensure that all responses were properly gathered.

Throughout the entire process, strict measures were observed to maintain the confidentiality of the respondents' answers. Care was also taken to ensure the accuracy and integrity of the data collected, from distribution up to retrieval, to support the reliability of the study's findings.

Collection and statistical treatment of data. The researcher personally retrieved the questionnaires on December 15, 2025, ensuring that all responses were collected in an organized and secure manner. After retrieval, the completed questionnaires were immediately submitted to the designated statistician for further analysis.

The researcher worked closely with the statistician during the tabulation process, carefully organizing each response to ensure accuracy, consistency, and completeness of the data. Every entry was thoroughly checked to establish a reliable dataset that would serve as a solid foundation for statistical treatment.

Once the data were properly organized, a comprehensive analysis was carried out using appropriate statistical methods to identify patterns, relationships, and key findings. This systematic process helped ensure the validity and reliability of the results, allowing the study to generate sound and meaningful conclusions.

2.6. *Data Analysis*—The following statistical tools were used in the analysis and inter-

pretation of the responses in this study:

Mean. It was used to determine the extent of continuous professional development of public elementary schools of San Roque District, Division of Davao City. It was used as a statistical tool in studying the Continuous Professional Development (CPD) and teachers' effectiveness in K to 12 curriculum because it provides a simple yet reliable measure of the central tendency of the data. By calculating the mean, researchers can determine the average perception, performance, or effectiveness level of teachers based on their responses, making it easier to interpret the overall trend.

Moreover, using the mean allows for straightforward comparison between variables, such as different aspects of CPD and levels of teacher effectiveness. It helps identify whether higher participation in CPD correlates with improved instructional quality, classroom management, or assessment literacy.

Standard Deviation. It was used in this study as a statistical measure to determine the degree of variability in teachers' responses regarding continuous professional development and teacher effectiveness in public elementary schools. Specifically, it helped identify how far individual responses deviate from the mean, providing a clearer picture of the consistency or dispersion of perceptions among the respondents. A smaller standard deviation indicates that the responses are closely clustered around the mean, suggesting a relatively uniform perception of continuous professional development practices and teacher effectiveness. Conversely, a larger standard deviation reflects greater variability in responses, which may indicate differing experiences, levels of participation, or perceptions among teachers.

Pearson Product Moment Correlation Coefficient (Pearson-r). It was used to determine the extent of continuous professional development (CPD) among public elementary school teachers in San Roque District, Division of Davao

City. In this study, it served as a statistical tool in examining Continuous Professional Development (CPD) in relation to teachers' effectiveness in the K to 12 curriculum, as it measures both the strength and direction of the relationship between two variables. Through this, the researcher was able to determine whether higher levels of CPD participation are associated with improved teacher effectiveness, as well as the extent of that relationship.

In addition, Pearson r provides a clear numerical value that allows for straightforward interpretation of the correlation, whether it is positive, negative, or negligible. This made it particularly useful in validating the assumed relationship between CPD and different aspects of teacher effectiveness, including instructional quality, classroom management, and assessment literacy.

Multiple Linear Regression. This was used to determine the extent of continuous professional development (CPD) in relation to teachers' effectiveness in the K to 12 curriculum among public elementary schools in San Roque District, Division of Davao City. Multiple Linear Regression was selected as the statistical tool for this analysis because it allows for the examination of how several CPD-related factors simultaneously influence teacher effectiveness. Through this method, the study was able to identify which specific aspects of CPD such as training quality, frequency of participation, and relevance of activities contribute significantly to improvements in instructional quality, classroom management, and assessment literacy.

Moreover, Multiple Linear Regression provides the ability to predict teacher effectiveness based on a combination of independent variables, offering a more comprehensive understanding than analyzing each factor in isolation. It also helps determine the strongest predictors of teacher performance, which can be valuable in guiding policymakers and school leaders. In this way, the findings may support the develop-

ment and

prioritization of more targeted and effective CPD programs that are directly aligned with improving teaching outcomes in the K to 12 curriculum.

2.7. Ethical Consideration—The research promptly observed the protocols deemed appropriate and necessary as standard guidelines in carrying out the research study, following the study protocol assessment criteria, particularly in managing population data. The survey questionnaire with supporting authors was submitted for further evaluation. After approval from the Ethics Committee, the researcher proceeded to the next phase of the study.

Social Value. Continuous Professional Development (CPD) and teachers' effectiveness within the K to 12 curriculum play an important role in improving the overall quality of education and in supporting the development of learners. When teachers consistently engage in professional growth, they become more prepared to deliver instruction that is relevant, engaging, and aligned with competency-based learning. This allows them to respond more effectively to the diverse needs of learners, which can contribute to better academic performance, improved completion rates, and the development of essential life skills such as critical thinking, communication, problem-solving, and collaboration. In this way, learners are not only prepared for academic success but are also better equipped to participate meaningfully in society as responsible and informed individuals.

In addition, teachers who actively pursue professional development tend to contribute to reducing educational inequalities. As they refine their skills and improve their instructional practices, they are better able to provide more equitable learning opportunities for students, regardless of their background or learning context. This helps create a more inclusive classroom environment where learners feel supported and valued, while also encouraging stronger social

connections within the school community. In many instances, it also opens more opportunities for learners from marginalized groups by ensuring that they receive appropriate guidance and quality instruction.

Beyond the classroom, the benefits of effective teaching supported by CPD extend to broader societal development. Improved teaching practices contribute to the development of a more competent and adaptable workforce capable of meeting the demands of a changing global environment. In this sense, CPD and teacher effectiveness in the K to 12 curriculum are not only important for improving academic outcomes but also for helping shape a more inclusive, progressive, and resilient society where learners are empowered to succeed and contribute positively to their communities.

Informed Consent. The researcher obtained the respondents’

consent through a written informed consent form. Before they agreed to participate, they were fully informed about the purpose of the study, and clear explanations were provided so they could understand why their

involvement was being requested. This gave them enough time and information to make an informed decision on whether or not to take part in the study.

It was also clearly emphasized that participation was completely voluntary, with no pressure or coercion of any kind. For those who chose not to participate, their decision was respected without any further questions or requirements. Throughout the process, the researcher remained considerate of the respondents’ psychological well-being, ensuring that their participation was comfortable and did not cause unnecessary stress or discomfort.

Vulnerability of Research Participants. The respondents of this study were teachers from public elementary schools in San Roque District, with the study focusing on their continuous professional development (CPD) and their effec-

tiveness in implementing the K to 12 curriculum. Since all participants were of legal age, they were not considered vulnerable in any legal or psychological sense. To avoid disrupting their work, the researcher scheduled the survey at times that were most convenient for the teachers, taking into account their classroom duties and other professional responsibilities.

Throughout the process, strict confidentiality was observed in

handling all information provided by the participants. Their responses were securely stored and used strictly for research purposes, ensuring both the protection of the respondents and the integrity of the study. In

this way, the research aimed to produce meaningful insights into how continuous professional development contributes to teacher effectiveness within the local K to 12 educational setting.

Conflict of Interest. Conflicts surrounding Continuous Professional Development (CPD) and its impact on teachers’ effectiveness in the K to 12 curriculum often arise from differing priorities among policy implementers, school administrators, and teachers. While CPD programs are intended to enhance teaching skills and improve learner outcomes, some teachers perceive them as added workload or compliance requirements that do not always align with classroom realities. This may lead to limited engagement or resistance, which can lessen the overall impact of CPD initiatives. At the same time, school administrators may focus more on meeting Department of Education requirements, sometimes emphasizing the number of trainings attended rather than their relevance or quality, creating a gap between policy expectations and actual classroom needs.

Another issue involves unequal access to CPD opportunities. Teachers in remote or under-resourced areas often have fewer chances to attend quality training compared to those in urban schools, resulting in differences in professional

growth and, in some cases, instructional effectiveness. This raises concerns about fairness and inclusivity in CPD implementation. In some instances, external training providers may also influence the focus of CPD programs, which may not always fully align with the specific needs of teachers and learners.

Privacy and Confidentiality. This study strictly complied with the provisions of the Data Privacy Act of 2012 to ensure the protection of all participants. The researcher carefully ensured that the collected data could not be traced back to any respondent, safeguarding their identities and maintaining the confidentiality of their responses. No personal information was shared or disclosed without the participants' consent.

Access to the data was limited solely to the researcher, keeping all information secure throughout the research process. These measures were consistently observed to prevent unauthorized access and to ensure that the respondents' participation remained fully private and protected.

Risk, Benefits, and Safety. In administering the survey questionnaires for this study on continuous professional development (CPD) and teacher effectiveness in the K to 12 curriculum among public elementary schools in San Roque District, the researcher ensured that all respondents were fully informed about the nature of their participation. The purpose of the study and its potential benefits, particularly in improving CPD practices and strengthening teaching effectiveness, were clearly explained. Assurances of confidentiality were also provided, as reflected in the online survey, and respondents were encouraged to ask questions whenever clarification was needed to ensure a full understanding of their role.

Throughout the process, the researcher made sure that no harm was caused to any participant, and all instruments were carefully designed

to avoid any offensive or inappropriate lan-

guage. The study was conducted purely for academic purposes, and respondents were not required to provide any personal information, ensuring their privacy and comfort. To accommodate their schedules, teachers were given sufficient time to complete the survey at their own pace, with the option to skip questions they were uncomfortable with or withdraw from the study at any time if they chose to do so.

Justice. To ensure fairness in selecting respondents, the researcher maintained equal consideration for all potential participants and avoided any form of bias throughout the process. The selection was guided strictly by the inclusion criteria, with only bona fide permanent-regular secondary teachers from the purposively selected schools included in the study.

During data collection, the researcher also took into account the teachers' time and professional responsibilities by ensuring that disruptions to their daily routines were kept to a minimum. Activities were scheduled in a way that was least intrusive to their work to allow them to participate without added pressure. As a simple gesture of appreciation for their time and cooperation, a small token was also given to the respondents.

Transparency. In conducting this research, all communication with participants was carried out with honesty and transparency to build trust and maintain ethical standards. The researcher carefully followed the

procedures outlined in the study to ensure the protection and welfare of all respondents, recognizing their essential role in providing reliable and meaningful data. Supporting documents used in the data analysis were also properly included to strengthen the credibility of the study and allow for verification when necessary.

In addition, the researcher clearly explained the scope of the respondents' participation so that they fully understood their role in the study. Throughout the analysis and presentation of findings, objectivity was strictly observed to

ensure that the results were interpreted fairly and based solely on the data gathered.

Qualification of the Researcher. The researcher is currently pursuing a Master of Arts in Educational Management at Rizal Memorial Colleges. She works as a mathematics writer for self-learning modules, where she contributes to the development of instructional materials aligned with curriculum standards. In addition, she has participated in professional training focused on contextualizing least mastered competencies in Mathematics and Science, with the goal of improving both teaching practices and learner learning outcomes.

At present, the researcher serves as a Teacher III in the San Roque District. As part of her commitment to professional growth, she regularly attends seminars, trainings, and workshops relevant to her role as an educator. These experiences have helped deepen her understanding of

instructional practices and strengthened her research skills, which informed the conduct of this study.

The researcher also gratefully acknowledges the support and contributions of individuals and institutions who assisted in the completion of this research. A copy of the finalized study was submitted to the Schools Division of Davao City to ensure that the findings are accessible to stakeholders for reference, learning, and future research. Through this, the study seeks to offer practical insights that may contribute to continuous professional development and further advancement in the field of education.

Adequacy of Facilities. The researcher conducted the study in a well-prepared and conducive setting where all necessary materials were readily available, and activities were completed within the planned schedule. This organized environment helped maintain focus, allow-

ing respondents to provide accurate and thoughtful responses that supported the reliability of the data gathered.

To ensure accuracy in data handling, the respondents' ratings were encoded on the same day they were collected, particularly during times when the researcher was most alert. This helped minimize encoding errors and ensured proper recording of data. The analysis and interpretation were then carefully carried out in line with the study's objectives to ensure the validity of the findings.

In addition, the researcher utilized the Graduate School library for the review of related literature and studies, consulting relevant books, journals, and published theses. These sources helped strengthen the theoretical and conceptual foundation of the study and ensured that it was grounded in established scholarly work.

Community Involvement. Community involvement was observed throughout all phases of the research process, from planning to reporting, as it was seen as essential in ensuring the relevance and usefulness of the study. The researcher also intended to share the results with the community so that the findings could be meaningfully applied. In addition, community input was considered in identifying the research focus, selecting appropriate methods suited to the local context, and determining how the results could be used in practice.

In line with this, the researcher shared the findings, conclusions, and recommendations with her school and the wider school community to help stakeholders make use of the results in improving practices and decision-making. In this way, the study went beyond academic requirements and also served as a practical contribution to the enhancement of teaching and learning within the school setting.

3. Results and Discussion

Presented in this chapter are the results of the data gathered. Two sets of research were employed to determine the extent of continuous professional development and teachers' effectiveness in K to 12 Curriculum of public elementary schools in San Roque District, Division of Davao City.

The discussion of results and interpretations was organized based on the statement of the problems of the study to ensure clarity and coherence. It was presented using specific sub-headings, including the extent of continuous professional development in terms of job satisfaction, teaching competence, and career advancement; the extent of teachers' effectiveness in the K to 12 curriculum in terms of instructional quality, classroom management, and assessment literacy; and the identification of which CPD domains significantly influence teachers' effectiveness in public elementary schools in San Roque District, Division of Davao City. This structure helped provide a clear and systematic presentation of the find-

ings.

3.1. Level of Continuous Professional Development—Continuous Professional Development (CPD) is an ongoing process through which teachers enhance their knowledge, skills, and teaching

practices to better meet the evolving needs of learners. By engaging in CPD, educators not only improve their instructional effectiveness but also foster a culture of lifelong learning and professional growth.

Improved Job Satisfaction. Table 1 presents the extent of continuous professional development in terms of improved job satisfaction among public elementary school teachers in San Roque District. Overall, the results showed that improved job satisfaction obtained a mean score of

4.00 (SD=0.53), which indicated a high extent and suggested that continuous professional development positively contributed to teachers' sense of fulfillment and motivation in their work.

Table 1. Extent of Continuous Professional Development in Terms of Improved Job Satisfaction

No	Statements	Mean	SD	Descriptive Equivalent
1	Feel a greater sense of accomplishment after applying new skills learned from CPD.	3.94	0.86	Extensive
2	Participation in CPD activities increases teachers' enthusiasm for their daily teaching tasks.	3.89	0.86	Extensive
3	Report higher confidence in addressing classroom challenges after professional development.	4.03	0.79	Extensive
4	CPD engagement fosters a positive outlook toward the teaching profession.	4.12	0.76	Extensive
5	Experience increased motivation to remain in their current school after skill enhancement.	4.03	0.76	Extensive
Overall Mean		4.00	0.53	Extensive

The data indicate that teachers feel a stronger sense of accomplishment after applying skills learned from continuous professional development (M=3.94, SD=0.86), showing that CPD translates into meaningful classroom im-

provements. This aligns with the work of Guskey (2020), who emphasized that professional learning becomes impactful when teachers can apply new knowledge and observe positive results in practice. As a result, CPD not

only enhances competence but also reinforces teachers' sense of purpose and satisfaction in their roles.

Similarly, participation in CPD activities increases teachers' enthusiasm for their daily teaching tasks ($M=3.89$, $SD=0.86$), suggesting that ongoing learning helps sustain motivation. Desimone and Garet (2019) highlighted that effective professional development fosters engagement by connecting training directly to classroom needs. In this way, CPD acts as a catalyst for renewed energy and commitment to teaching responsibilities.

Teachers also report higher confidence in addressing classroom challenges after engaging in professional development ($M=4.03$, $SD=0.79$), reflecting improved self-efficacy. Tschannen-Moran and Hoy (2020) explained that teachers' belief in their capabilities grows when they are supported through relevant and continuous training experiences. Consequently, CPD strengthens teachers' ability to manage diverse classroom situations with assurance and competence.

Moreover, CPD engagement fosters a more positive outlook toward the teaching profession ($M=4.12$, $SD=0.76$), indicating that professional growth influences attitudes and job satisfaction. Day and Gu (2020) noted that teachers who participate in continuous development are more likely to maintain resilience and a strong professional identity. Therefore, CPD contributes not only to skill enhancement but also to sustaining a positive and committed

The findings reveal that teachers are highly capable of integrating innovative teaching strategies learned from continuous professional development (CPD) into their classroom instruction ($M=4.23$, $SD=0.91$), interpreted as very extensive. This suggests that CPD equips teachers with practical and adaptable strategies that directly influence classroom

effectiveness. This result is supported by

teaching workforce.

In addition, teachers experience increased motivation to remain in their current school after enhancing their skills ($M=4.03$, $SD=0.76$), highlighting the role of CPD in retention. Ingersoll et al. (2021) found that access to professional growth opportunities significantly reduces teacher turnover and strengthens organizational commitment.

This result was pertinent to the study of Rashid and Maqbool (2025) confirmed a strong positive relationship between teachers' participation in professional development programs and their overall job satisfaction, showing that public elementary school teachers who engaged more frequently in relevant CPD activities reported higher levels of work fulfillment and contentment.

Enhanced Teaching Competence. Table 2 indicates that the respondents perceived the extent of continuous professional development in providing enhanced teaching competence as extensive, with an overall mean score of 3.67 ($SD=0.86$), indicates that CPD assistance plays a substantial role in enhancing teaching competence among public

elementary school teachers. This implies that sustained professional development programs are essential in maintaining high teaching standards and improving educational quality. The findings affirm that investing in CPD leads to more competent, adaptive, and effective educators.

Darling-Hammond et al. (2020), who emphasized that high-quality professional development strengthens instructional innovation by aligning theory with actual teaching practice.

Moreover, participation in CPD improves teachers' ability to design engaging and learner-centered lesson plans ($M=3.59$, $SD=0.88$), indicating that teachers are becoming more responsive to learners' needs. This reflects a shift from

Table 2. Extent of Continuous Professional Development in Terms of Enhanced Teaching Competence

No	Statements	Mean	SD	Descriptive Equivalent
1	Effectively integrate innovative teaching strategies learned from CPD into classroom instruction.	4.23	0.91	Very Extensive
2	Participation in CPD improves teachers' ability to design engaging and learner-centered lesson plans.	3.59	0.88	Extensive
3	Demonstrate increased proficiency in using educational technology and digital tools.	3.49	0.76	Extensive
4	CPD participation enhances teachers' capacity to assess and address diverse learner needs.	3.48	0.71	Extensive
5	Apply updated pedagogical knowledge to improve learner learning outcomes.	3.57	0.86	Extensive
Overall Mean		3.67	0.49	Extensive

traditional teaching approaches to more interactive and learner-focused instruction. According to Desimone (2019), effective professional development enhances teachers' pedagogical design skills by promoting active learning, coherence, and content focus.

In addition, teachers demonstrate increased proficiency in using educational technology and digital tools ($M=3.49$, $SD=0.76$), highlighting the role of CPD in supporting digital competence. As classrooms become more technology-driven, teachers' ability to integrate digital tools is essential for effective instruction. Tondeur et al. (2021) noted that continuous training significantly improves teachers' confidence and competence in technology integration, which in turn enhances teaching quality.

Similarly, CPD participation enhances teachers' capacity to assess and address diverse learner needs ($M=3.48$, $SD=0.71$), reflecting inclusivity in teaching practices. This indicates that teachers are becoming more aware of differentiated instruction and are better equipped to support varied learning abilities. Tomlinson (2020) explained that professional

development plays a key role in helping teachers implement differentiated strategies that cater to diverse learners in inclusive classrooms.

Furthermore, teachers are able to apply

updated pedagogical knowledge to improve learner outcomes ($M=3.57$, $SD=0.86$), showing that CPD contributes to continuous improvement in teaching practices. This demonstrates that teachers are not only acquiring knowledge but also effectively translating it into improved student performance. Hattie (2023) highlighted that updated pedagogical practices, when applied consistently, have a significant positive impact on student learning outcomes.

The result aligned with the perspective of Zaqiah et al. (2024), who found that participation in an in-service teacher education program significantly improved teachers' pedagogical, professional, social, and personal competencies, demonstrating that structured professional development directly contributed to enhanced teaching competence.

Increased Career Advancement. The respondents' perceptions about the extent of the role of continuous professional development in terms of increased career advancement were shown in Table 3, with a mean score of 3.57 ($SD=0.42$), which was classified as extensive. It indicates that continuous professional development (CPD) assistance plays a meaningful role in advancing teachers' careers within the public elementary school system.

Table 3. Extent of Continuous Professional Development in Terms of Increased Career Advancement

No	Statements	Mean	SD	Descriptive Equivalent
1	Gain eligibility for higher teaching positions after completing CPD programs.	3.45	0.78	Extensive
2	Participation in CPD leads to promotions or role expansions within the school system.	3.33	0.76	Extensive
3	Receive recognition and awards for professional growth achieved through CPD.	3.54	0.79	Extensive
4	Develop leadership skills that enable them to take on supervisory or mentoring roles.	3.42	0.78	Extensive
5	CPD participation increases teachers' chances of qualifying for specialized teaching assignments.	4.12	0.62	Extensive
Overall Mean		3.57	0.42	Extensive

Looking closely at the indicators, gaining eligibility for higher teaching positions ($M=3.45$, $SD=0.78$) reflects how CPD enhances teachers' qualifications and readiness for promotion. This implies that professional learning experiences help teachers meet the standards required for higher roles in the education system. Similarly, participation in CPD leading to promotions or role expansion ($M=3.33$, $SD=0.76$) highlights its influence on career mobility, supporting the idea that continuous learning is closely linked to professional growth and institutional recognition (Darling-Hammond et al. 2020).

Furthermore, receiving recognition and awards ($M=3.54$, $SD=0.79$) demonstrates that CPD contributes to visible professional achievements, which can motivate teachers to pursue excellence in their practice. Alongside this, the development of leadership skills ($M=3.42$, $SD=0.78$) shows that CPD prepares teachers not only for classroom instruction but also for supervisory and mentoring roles. According to Day and Gu (2019), professional development fosters leadership capacity by equipping teachers with the knowledge, confidence, and skills needed to take on expanded roles within schools.

In addition, the highest-rated indicator,

CPD increasing teachers' chances of qualifying for specialized teaching assignments ($M=4.12$, $SD=0.62$) suggests that teachers see CPD as a strong enabler of specialization and expertise. This implies that targeted training allows teachers to develop niche competencies that are valued within the school system. Opfer and Pedder (2019) explained that effective professional development supports differentiated career pathways by helping teachers build specialized knowledge aligned with evolving educational demands.

3.2. Level of Teachers' Effectiveness in K to 12 Curriculum—Teachers' effectiveness in K to 12 curriculum plays a vital role in ensuring quality education and promoting meaningful learning experiences for learners in public elementary schools. In San Roque District, Division of Davao City, evaluating how teachers deliver lessons,

manage classrooms, and apply instructional strategies helps highlight their professional strengths and areas for growth.

Instructional Quality. Table 4 presented the respondents' extent of teaching learning outcomes based on improved academic performance, which was rated as extensive, with an overall mean score of 4.02 ($SD=0.47$). This

meant that public elementary school teachers perceived their instructional practices as effectively supporting learners' academic growth, resulting in better understanding, performance, and achievement in the classroom.

Table 4. Extent of Teachers Effectiveness in K to 12 Curriculum in Terms of Instructional Quality

No	Statements	Mean	SD	Descriptive Equivalent
1	Presents lessons clearly, logically, and in a well-organized manner to facilitate learner understanding.	4.18	0.75	Extensive
2	Uses a variety of instructional strategies and materials to cater to different learning styles and needs.	3.92	0.82	Extensive
3	Provides timely and constructive feedback that guides learners toward improvement.	4.00	0.70	Extensive
4	Actively engages learners in the learning process through interactive and participatory activities.	3.91	0.77	Extensive
5	Effectively assesses learning outcomes and adjusts instruction based on learners' performance and progress.	4.08	0.77	Extensive
Overall Mean		4.02	0.47	Extensive

Specifically, the highest rated indicator, presenting lessons clearly and logically (M=4.18, SD=0.75), suggests that teachers are able to structure content in ways that support learner comprehension. This reflects an understanding of how organized instruction reduces confusion and promotes meaningful learning. Rosenshine (2019) explained that well-sequenced lessons and explicit instruction are fundamental principles that enhance learners' ability to process and retain information effectively.

In addition, the use of varied instructional strategies and materials (M=3.92, SD=0.82) shows that teachers are attentive to diverse learning styles and needs. This implies that classrooms are becoming more inclusive, where different approaches are used to ensure that all learners can participate and succeed. According to Tomlinson (2020), differentiated instruction allows teachers to address learner variability, thereby improving engagement and overall academic performance.

Moreover, providing timely and constructive feedback (M=4.00, SD=0.70) highlights teachers' role in guiding students toward im-

provement. Feedback serves as a bridge between current performance and desired learning outcomes, helping students recognize areas for growth. Hattie and Timperley (2021) noted that effective feedback significantly influences learning by clarifying goals, reinforcing progress, and encouraging self-regulation among learners.

Furthermore, actively engaging learners through interactive and participatory activities (M=3.91, SD=0.77) reflects a shift toward student-

centered teaching practices. This suggests that teachers are fostering active involvement rather than passive learning, which enhances motivation and deeper understanding. Fredricks et al. (2019) emphasized that learner engagement behavioral, emotional, and cognitive is essential for sustaining interest and improving academic outcomes.

Finally, the ability to assess learning outcomes and adjust instruction based on learners' performance (M=4.08, SD=0.77) demonstrates reflective and responsive teaching. This indicates that teachers are using assessment data to

inform their instructional decisions and tailor their approaches to learners' needs. Black and Wiliam (2018) highlighted that formative assessment practices enable teachers to continuously refine instruction, leading to more effective and responsive teaching.

Classroom Management. As shown in Table 5, the respondents' extent of teachers' effectiveness in K to 12 curriculum in relation to class-

room management was assessed among public elementary schools, with an overall mean score of 3.86, (SD=0.52) categorized as extensive. This means that public elementary school teachers are generally effective in maintaining order, fostering a positive learning environment, and managing classroom activities, which supports better learner engagement and learning outcomes.

Table 5. Extent of Teachers Effectiveness in K to 12 Curriculum in Terms of Classroom Management

No	Statements	Mean	SD	Descriptive Equivalent
1	Establishes and consistently enforces clear classroom rules and expectations.	4.15	0.66	Extensive
2	Maintains an orderly and safe learning environment conducive to learner engagement.	3.68	0.87	Extensive
3	Effectively manages time to maximize instructional activities and minimize disruptions.	3.68	0.79	Extensive
4	Uses proactive strategies to prevent and address misbehavior constructively.	3.82	0.87	Extensive
5	Fosters a respectful and inclusive atmosphere that promotes positive learner relationships.	3.95	0.87	Extensive
Overall Mean		3.86	0.52	Extensive

n particular, the ability to establish and consistently enforce clear classroom rules and expectations (M=4.15, SD=0.66) reflects strong teacher authority and organization in managing student behavior. This indicates that teachers set clear boundaries that guide learners toward appropriate conduct and responsibility. Evertson and Weinstein (2020) emphasized that clearly communicated expectations are foundational to effective classroom management, as they create a predictable and orderly learning environment.

Meanwhile, maintaining an orderly and safe learning environment (M=3.68) and effectively managing time (M=3.68, SD=0.87) highlight

teachers' capacity to sustain productive classroom routines. These practices suggest that teachers are able to minimize disruptions and ensure that instructional activities are prioritized. Marzano (2017) noted that structured classroom routines and efficient time management significantly contribute to increased learner engage-

ment and improved learning performance.

Furthermore, the use of proactive strategies to prevent and address misbehavior (M=3.82, SD=0.87) demonstrates that teachers focus on prevention rather than reaction. This implies that teachers anticipate potential issues and apply constructive approaches to maintain discipline. Simonsen et al. (2019) explained that proactive classroom management strategies, such as positive reinforcement and clear procedures, reduce behavioral problems and foster a more supportive learning climate.

In addition, fostering a respectful and inclusive classroom atmosphere (M=3.95, SD=0.78) indicates that teachers value positive relationships and emotional safety among learners. This suggests that classrooms are environments where learners feel respected, accepted, and motivated to participate. According to Jennings and Greenberg (2019), positive teacher-learner relationships and inclusive practices are criti-

cal components of effective classroom management, as they enhance learner engagement and social-emotional development.

Overall, the results confirm that teachers exhibit strong classroom management skills that contribute to a conducive learning environment.

The findings imply that continuous support and professional development in classroom management strategies should be sustained to further strengthen these competencies. As highlighted by Darling-Hammond et al. (2020), ongoing teacher development plays a vital role in maintaining effective classroom practices and improving overall teaching quality.

The findings align with the study of Putra and Yanto (2025), which, through a synthesis of multiple research studies, emphasized that effective classroom management practices consistently enhance diverse learners' academic achievement across various educational con-

texts. Their work reinforces the idea that strong classroom management is a fundamental component of teaching quality, as it creates an organized, supportive, and engaging learning environment. This, in turn, contributes significantly to improved learner learning outcomes and overall educational success.

Assessment Literacy. Table 6 presents the respondents' extent of teachers' effectiveness in the K to 12 curriculum in relation to assessment literacy, with an overall mean score of 3.91 (SD=0.54), which was categorized as extensive. This meant that public elementary school teachers generally demonstrated competence in designing, implementing, and interpreting assessments to monitor learner learning, although there remained opportunities to further enhance their skills for more precise and impactful evaluation.

Table 6. Extent of Teachers Effectiveness in K to 12 Curriculum in Terms of Assessment Literacy

No	Statements	Mean	SD	Descriptive Equivalent
1	Designs assessments that align with learning objectives and curriculum standards.	3.96	0.76	Extensive
2	Uses a variety of assessment methods to accurately measure learner learning and progress.	3.88	0.82	Extensive
3	Uses a variety of assessment methods to accurately measure learner learning and progress.	3.88	0.83	Extensive
4	Provides clear and timely feedback to help learners understand their strengths and areas for improvement.	3.87	0.76	Extensive
5	Ensures that assessment practices are fair, valid, and reliable for all learners.	3.94	0.80	Extensive
Overall Mean		3.91	0.54	Extensive

The results suggest that teachers demonstrate strong assessment literacy, particularly in designing assessments that are aligned with learning objectives and curriculum standards (M=3.96, SD=0.76). This reflects an understanding of constructive alignment, where assessments are intentionally planned to match what learners are expected to achieve. In prac-

tice, this indicates that assessment tasks are not developed arbitrarily but are carefully connected to intended learning outcomes, ensuring coherence in the teaching and learning process.

Similarly, the use of varied assessment methods to measure learner progress (M=3.88, SD=0.82) shows that teachers are making efforts to

capture different aspects of student learning. This suggests an awareness that relying on a single assessment approach may not fully reflect learner performance. In many cases, the integration of formative and performance-based assessments allows for a more comprehensive understanding of learner development.

The result for providing clear and timely feedback ($M=3.87$, $SD=0.76$) further indicates that teachers actively support learners in identifying their strengths and areas for improvement. Feedback, in this sense, becomes a guiding tool that helps learners gradually improve their performance and understanding over time.

In addition, ensuring that assessment practices are fair, valid, and reliable ($M=3.94$, $SD=0.80$) reflects teachers' attention to ethical and quality standards in evaluation. This suggests that assessment practices are designed to minimize bias while accurately measuring intended competencies, which is essential in promoting fairness in learner evaluation.

Overall, the findings indicate that teachers possess a strong level of assessment literacy, which contributes to more effective teaching and learning processes. This also implies the need

to sustain and further strengthen professional development programs focused on assessment practices, as enhancing these competencies can lead to improved instructional quality and better learning outcomes.

3.3. Significant Relationship Between Continuous Professional Development and Teachers' Effectiveness in K to 12 Curriculums of Public Elementary Schools of San Roque District, Division of Davao City—The results in Table 7 reveal a statistically significant relationship between continuous professional development (CPD) and teachers' effectiveness in the K to 12 curriculum, as shown by the overall correlation ($r=0.671$, $p=0.000$). This indicates that as teachers engage more in CPD, their effectiveness in classroom practice also improves. Anchored on the Human Capital Theory, this finding suggests that investments in teachers' knowledge and skills directly enhance their productivity and performance (Becker, 1993; updated discussion in Hanushek & Woessmann, 2020). Consequently, schools that prioritize sustained professional learning are more likely to experience improved instructional quality and learner outcomes.

Table 7. Significant Relationship Between Continuous Professional Development and Teachers' Effectiveness in K to 12 Curriculums

Continuous Professional Development	r	p-value	Decision on Ho
Improved Job Satisfaction	0.690	0.000	Reject
Enhanced Teaching Competence	0.565	0.000	Reject
Increased Career Advancement	0.445	0.000	Reject
Overall	0.671	0.000	Reject

Specifically, CPD in terms of improved job satisfaction shows a strong positive relationship with teachers' effectiveness ($r=0.690$), implying that satisfied teachers tend to perform better in their roles. When teachers

feel fulfilled and valued, they become more motivated to deliver quality instruction and en-

gage learners effectively. This aligns with Self-Determination Theory, which emphasizes that fulfillment of psychological needs enhances motivation and performance (Ryan & Deci, 2020). Moreover, Collie (2021) highlighted that teacher well-being and satisfaction are closely linked to instructional effectiveness and class-

room engagement.

Furthermore, enhanced teaching competence through CPD demonstrates a moderate positive relationship with teachers' effectiveness ($r=0.565$), indicating that skill development significantly contributes to better teaching practices. As teachers gain updated pedagogical knowledge and strategies, they become more capable of addressing diverse learner needs. This finding is supported by Constructivist Learning Theory, which underscores the importance of teachers as facilitators of meaningful learning experiences (Vygotsky, 1978; extended applications in Darling-Hammond et al., 2020). In addition, Opfer and Pedder (2011) emphasized that effective professional development strengthens instructional competence and leads to improved classroom performance.

In terms of increased career advancement ($r=0.445$), the results still show a significant relationship, although comparatively weaker than the other indicators. This suggests that opportunities for promotion and professional growth also contribute to teachers' effectiveness, but may not be as immediate in influencing classroom practices. Guided by Career

Development Theory, professional growth opportunities motivate individuals to enhance their performance and pursue excellence (Super, 1990; contemporary insights in Savickas, 2021).

Overall, the rejection of the null hypothesis

across all indicators confirms that CPD plays a crucial role in enhancing teachers' effectiveness in the K to 12 curriculum. These findings imply that educational leaders should invest in comprehensive, sustained, and needs-based professional development programs. Supporting this, Desimone and Garet (2015) argued that high-quality professional development significantly improves teaching practices and learner learning outcomes.

3.4. Regression Analysis on the Significant Influence of Continuous Professional Development on Teachers' Effectiveness in K to 12 Curriculums of Public Elementary Schools of San Roque District, Division of Davao City—The regression results in Table 8 demonstrate that continuous professional development (CPD) significantly influences teachers' effectiveness in the K to 12 curriculum, as reflected by the overall model ($R=0.777$, $R^2=0.604$, $p=0.000$). This means that about 60.4% of the variation in teachers' effectiveness can be explained by CPD indicators, suggesting a strong predictive relationship. Grounded in Human Capital Theory, investments in professional learning enhance teachers' competencies, which in turn improve their performance and instructional outcomes (Becker, 1993; Hanushek & Woessmann, 2020). Thus, sustained CPD initiatives are not only beneficial but essential in strengthening educational quality.

Table 8. Regression Analysis on the Significant Influence of Continuous Professional Development on Teachers' Effectiveness in K to 12 Curriculums

Predictor	B	Std. Error	Beta	t	Sig.	Decision on Ho	Interpretation
Constant	.840	.247		3.405	.001		
Improved Job Satisfaction	.408	.049	.539	8.375	.000	Reject	Significant
Enhanced Teaching Competence	.200	.057	.245	3.495	.001	Reject	Significant
Increased Career Advancement	.201	.062	.211	3.225	.002	Reject	Significant

$R = 0.777$, $R^2 = 0.604$, $F\text{-Value} = 59.048$, $p\text{-value} = .000$ learning outcomes.

Among the predictors, improved job satisfaction emerged as the strongest contributor ($\beta=0.539$, $p=0.000$), indicating that teachers who feel more fulfilled in their roles tend to demonstrate higher effectiveness. When teachers experience satisfaction, they are more engaged, committed, and willing to go beyond basic instructional duties. This finding aligns with Self-Determination Theory, which posits that intrinsic motivation driven by satisfaction enhances performance and well-being (Ryan & Deci, 2020). Furthermore, Skaalvik and Skaalvik (2021) emphasized that teacher job satisfaction significantly predicts instructional quality and classroom engagement.

Enhanced teaching competence also significantly predicts teachers' effectiveness ($\beta=0.245$, $p=0.001$), highlighting the importance of continuous skill development. As teachers acquire new strategies, pedagogical approaches, and content knowledge through CPD, they

become more capable of delivering meaningful and inclusive instruction. This supports Constructivist Learning Theory, which emphasizes the teacher's role in facilitating active and meaningful learning experiences (Vygotsky, 1978; Darling-Hammond et al., 2020). In addition, Desimone (2009) noted that effective professional development improves teachers' knowledge and ultimately enhances student

Similarly, increased career advancement ($\beta=0.211$, $p=0.002$) significantly contributes to teachers' effectiveness, suggesting that opportunities for growth and promotion motivate teachers to improve their performance. When teachers see clear pathways for professional progression, they are more likely to invest effort in refining their teaching practices. This is supported by Career Development Theory, which explains that individuals are motivated to perform better when they perceive opportunities for advancement (Super, 1990; Savickas, 2021). Moreover, Day and Gu (2018) highlighted that professional growth opportunities sustain teacher motivation and long-term effectiveness.

Overall, the rejection of the null hypothesis for all variables confirms that CPD plays a crucial role in shaping teachers' effectiveness in K to 12 curriculum. The findings imply that school leaders and policymakers should prioritize well-designed, continuous, and relevant professional development programs that address teachers' needs. Anchored in Social Learning Theory, collaborative and experiential learning opportunities within CPD can further enhance teaching practices through shared

knowledge and reflection (Bandura, 1977; Opfer & Pedder, 2011). Therefore, strengthening CPD systems can lead to more competent, motivated, and effective teachers, ultimately improving learner outcomes.

4. Conclusions and Recommendations

This section gives the findings of the study based on the data outcome. The conclusions drawn from the findings of the study are also provided in this section. In order to make a significant contribution, the researcher has made recommendations in this chapter.

4.1. Findings—This study employed a non-experimental correlational research design

to examine the extent of continuous professional development (CPD) and teachers' effectiveness in the K to 12 curriculum among public elementary school teachers in San Roque District, Division of Davao City. Specifically, it sought to determine the level of CPD in terms of improved job satisfaction, enhanced teaching competence, and increased career advancement. It

also assessed teachers' effectiveness in the K to 12 curriculum in terms of instructional quality, classroom management, and assessment literacy. Furthermore, the study investigated the significant relationship between CPD and teachers' effectiveness within the same context.

The respondents of the study were 120 public elementary school teachers from San Roque District, Division of Davao City. A modified researcher-made survey questionnaire was used as the main instrument,

adapted from established frameworks on CPD practices and teacher effectiveness. The instrument was carefully reviewed and validated to ensure its suitability for the study context.

Findings revealed that the level of continuous professional development among teachers, in terms of job satisfaction, teaching competence, and career advancement, was generally high. Similarly, teachers' effectiveness in the K to 12 curriculum, as reflected in instructional quality, classroom management, and assessment literacy, was also rated as high.

Statistical analysis further showed a significant positive relationship between CPD and teachers' effectiveness, with a correlation coefficient of $r=0.671$ and a p -value of 0.000, leading to the rejection of the null hypothesis. This indicates that greater engagement in professional development is associated with higher levels of teaching effectiveness.

In addition, the regression analysis demonstrated strong explanatory power, with an R value of 0.777 and an R^2 of 0.604, suggesting that approximately 60.4% of the variance in teachers' effectiveness can be explained by CPD indicators. The model was also found to be statistically significant, as shown by an F -value of 59.048 and a p -value of 0.000.

Overall, the results indicate that continuous professional development significantly influences teachers' effectiveness in the K to 12 curriculum. In particular, indicators such as job satisfaction, teaching competence, and career

advancement emerged as meaningful predictors of instructional effectiveness in public elementary schools in San Roque District, Division of Davao City.

4.2. Conclusions—Based on the findings of this study, the following conclusions were offered:

The findings indicates that continuous professional development (CPD) among public elementary school teachers is widely practiced and consistently maintained at a high level. This reflects how ongoing efforts to strengthen teachers' knowledge and skills contribute to the gradual development of their professional capacity. In this regard, it is important for school leaders to continue giving priority to well-structured and relevant CPD programs, as these play a key role in sustaining and further improving the quality of teaching.

Teachers' effectiveness in implementing the K to 12 curriculum was also found to be consistently high, reflecting strong instructional practices and a solid level of professional competence. This suggests that teachers are generally able to facilitate meaningful and learner-centered experiences in their classrooms. To sustain this level of effectiveness, it remains important to provide supportive teaching environments and continuous training opportunities, enabling teachers to respond more effectively to the diverse needs of their learners.

A strong positive relationship was found between continuous professional development and teachers' effectiveness, suggesting that improvements in one area are closely associated with gains in the other. This indicates that as teachers continue to develop their knowledge and skills, their ability to deliver effective instruction also improves. In this regard, it becomes important for schools to support and strengthen collaborative professional learning environments, where teachers can share experiences, learn from one another, and continuously enhance their teaching practices.

The study further reveals that key aspects of continuous professional development such as improved job satisfaction, enhanced teaching competence, and increased opportunities for career advancement have a significant influence on teachers' effectiveness. These findings suggest that when teachers feel supported in their professional growth and see clear opportunities for development, they are more likely to perform at a higher level. In this regard, providing appropriate recognition, clear career pathways, and meaningful professional learning opportunities can help sustain teacher motivation and contribute to more effective teaching practices.

4.3. Recommendations—The following interventions were offered based on the conclusions of the study:

4.3.0. Continuous Professional Development—It is recommended that schools and education stakeholders continue to encourage and support teachers' active participation in continuous professional development (CPD) activities. Based on the findings, engaging in CPD appears to contribute to greater enthusiasm among teachers in carrying out their daily instructional tasks. When teachers are given regular opportunities for professional growth, they are more likely to feel motivated, refreshed, and confident in their teaching practices. Strengthening access to meaningful and relevant CPD programs may therefore help sustain positive attitudes toward teaching and enhance overall classroom performance.

It is recommended that school leaders and education stakeholders continue to strengthen and expand teachers' participation in continuous professional development (CPD) programs, particularly those focused on assessment and differentiated instruction. Findings suggest that CPD plays a meaningful role in enhancing teachers' ability to assess learners more accurately and respond effectively to their diverse needs. By engaging in sustained professional learning, teachers are better equipped to adjust

their instructional strategies, provide appropriate interventions, and support varied learning abilities in the classroom.

It is recommended that educational institutions strengthen policies that recognize and reward teachers' active participation in continuous professional development (CPD), particularly in relation to career

advancement and role expansion. The findings suggest that engagement in CPD is often associated with opportunities for promotion and increased responsibilities within the school system. When professional growth is meaningfully linked to career progression, teachers are more likely to pursue continuous learning and apply new knowledge in their practice. This, in turn, supports both individual career development and overall school improvement.

4.3.0. Teachers Effectiveness in K to 12 Curriculum—It is recommended that teachers continue to adopt and strengthen the use of interactive and participatory strategies in their classrooms to promote active learner engagement. The findings suggest that when learners are meaningfully involved in the learning process, they tend to demonstrate greater interest, participation, and understanding of the lesson. In this regard, schools may consider supporting teachers through targeted training and sharing of best practices that focus on learner-centered approaches. Such efforts can help sustain engaging classroom environments and enhance overall learning outcomes.

It is recommended that teachers continue to maintain a well-organized, safe, and supportive classroom environment, as this plays a crucial role in promoting active learner engagement. Establishing clear routines and expectations may help minimize disruptions and create a space where learners feel comfortable participating in classroom activities. At the same time, teachers are encouraged to strengthen their time management practices to ensure that instructional time is used efficiently. By carefully plan-

ning lessons and transitions, teachers can maximize learning opportunities while reducing unnecessary interruptions, ultimately contributing to more effective and meaningful classroom experiences.

It is recommended that teachers continue to provide clear and timely feedback as part of their regular instructional practice, as this plays an important role in helping learners recognize their strengths and identify areas that need improvement. When feedback is given promptly and communicated in a way that is easy to understand, learners are better able to reflect on their performance and make necessary adjustments. Schools may also consider supporting teachers

through professional development activities focused on effective feedback strategies, as this can further enhance the quality of learning and promote continuous improvement among learners.

For future researchers, it is recommended to examine additional factors that may influence teachers' career advancement and classroom management, such as leadership practices, organizational support, and teacher well-being. Expanding the scope of the study to include different grade levels, school contexts, or geographic locations may also provide a broader and more nuanced understanding of these variables and their impact on teaching effectiveness.

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