



Mediating Effect of Teachers' Self-Efficacy on Continuing Professional Development and Teaching Competency

Kristine C. Maladaga ^a, Edilberto Z. Andal, EdD^b

^a Teacher II, DepEd Don Eulogio Capino Elementary School Annex, Doloros, 4326 Philippines

^b Dean of CTE-GSAR Department, Laguna State Polytechnic University, San Pablo City, Laguna 4000 Philippines

a kristine.cartina@deped.gov.ph

ABSTRACT

*The study addresses the mediating effect of teachers' self-efficacy on the association between Continuing Professional Development (CPD) and teaching competency, with the goal of shedding light on how perceptions of teachers about their skills influence their professional progress and efficacy through descriptive correlation survey with the questionnaire as a gathering tool. The study found a strong relationship between CPD and teaching competency and it also indicated that teachers' self-efficacy strongly influences the association between CPD and teaching competency. There were significant connections between CPD activities and self-efficacy, particularly in training and mentoring ($r = .584^{**}$ and $r = .579^{**}$, respectively). Similarly, considerable relationships were established between self-efficacy and teaching competency areas, particularly classroom management ($r = .736^{**}$) and rapport with students ($r = .715^{**}$). A total impact of 0.5937 confirmed the considerable mediation function of self-efficacy, emphasizing its importance in translating professional development into improved teaching effectiveness.*

Keywords: Continuing Professional Development, Teachers' Self-efficacy, Teaching Competency

1. Introduction

The goal of the Department of Education (DepEd) has always been to ensure that quality education transpires to every learner wherein the teachers play a very important role of making sure that it takes place. With this, different policy mandates that are aligned with DepEd's goal have been crafted to continuously strengthen the advocacy of the department. As such, DepEd Order No. 42, s. 2017 also known as *National Adoption and Implementation of the Philippine Professional Standards for Teachers* was enacted to set the standards for teachers' professional growth and career development. Through this mandate, teachers were enlightened on the importance of equipping them with proper knowledge and skillset by engaging in Continuing Professional Development (CPD) to become on par with the evolving educational needs. As the Philippine education system encounters more complex difficulties, CPD is a vital method for teachers to adapt.

Nonetheless, the sheer presence of CPD frameworks does not necessarily indicate enhanced teaching proficiency. It is posited that despite the presence of CPD programs, their efficacy is predominantly contingent upon individual elements, especially self-efficacy, or the conviction of educators in their ability to execute teaching responsibilities competently. Bandura's (1997) self-efficacy hypothesis posits that individuals with elevated self-efficacy exhibit greater resilience, hence enhancing their receptiveness to diverse possibilities for professional development. In the realm of education, educators possessing elevated self-efficacy are more inclined to implement novel pedagogical methods acquired through CPD programs, hence enhancing overall teaching proficiency. Consequently, understanding the mediating role of teacher self-efficacy in the relationship between continuous professional development (CPD) and teaching proficiency is essential for maximizing the advantages of CPD for public school educators.

Despite robust evidence highlighting the significance of Continuing Professional Development (CPD) and self-efficacy in teaching proficiency, there exists a notable gap in research regarding the role of teacher self-efficacy as a mediating variable between CPD and teaching competency, especially within the Philippine context. Most existing research investigates CPD and self-efficacy independently or concentrates exclusively on CPD's direct influence on competency. There are limited understanding of how self-efficacy influences a teacher's capacity to effectively engage with CPD experiences and implement them in teaching practices.

The study examines the mediating role of teacher self-efficacy in the relationship between continuing professional development (CPD) and teaching competency, aiming to elucidate how teachers' opinions of their abilities impact their professional advancement and effectiveness. Through this, the significant role of self-efficacy in maximizing the impact of CPD on teaching competency will be fully understood.

The findings of the study can be a great opportunity for educational institutions to create an improved CPD programs that will address the needs of the teachers in terms of skill improvement, confidence building, and professional positions resiliency. With this, not only the teaching quality is expected to be enhanced, but also the educational outcomes

1.1 Statement of the Problem

The study aimed to assess the mediating effect of teachers' self-efficacy on Continuing Professional Development and teaching competency. Specifically, the study sought to answer the following questions:

1. What is the level of continuing professional development of teachers in terms of:
 - 1.1. trainings and seminars;
 - 1.2. mentoring;
 - 1.3. teachers research preparation; and
 - 1.4. graduate education/studies?
2. To what extent is teaching competency manifested by the respondent in terms of:
 - 2.1. instructional planning;
 - 2.2. instructional skills;
 - 2.3. knowledge of the subject matter;
 - 2.4. rapport with the students; and
 - 2.5. classroom management?
3. What is the level of teachers' self-efficacy as perceived by the respondents?
- 4.1 Is there a significant relationship between continuing professional development and teaching competency?
- 4.2 Is there a significant relationship between continuing professional development and teachers' self-efficacy?
5. Is teachers' self-efficacy significantly related to teaching competency?
6. Does teachers' self-efficacy significantly mediate the relationship of continuing professional development with teaching competency?

1. Methodology

This chapter examines the research design, demographics and sample size, research instrument, questionnaire validation, data collection approach, and statistical tools employed by the researcher to conduct this study.

This study employed a descriptive correlation survey utilizing a questionnaire as the primary data collection instrument, aiming to evaluate the mediating effect of teacher self-efficacy on continued professional development and teaching competency. The descriptive research method seeks to precisely and methodically characterize a population, situation, or phenomena (McCombes, Revised 2020).

One hundred thirteen teachers from the Dolores District, Division of Quezon, participated in the study. The researcher chose a comprehensive enumeration method, with all teachers in Dolores District participating as respondents.

This research employed a revised and adapted questionnaire consisting of three sections. The initial section of the survey encompasses the demographic profile of all primary school teachers in the District, including age, gender, marital status, years of service, designation, and educational qualifications. Part I concerns the Continuing Professional Development Questionnaire. Part II focuses on Teachers' Self-Efficacy. Part III concentrates on the instructional competencies of the respondents. The questionnaire utilized a five-point scale: 5 – Very High Level/Extent, 4 – High Level/Extent, 3 – Moderate Level/Extent, 2 – Low Level/Extent, and 1 – Very Low Level/Extent.

To ensure the instrument's consistency and correctness, the researcher presented the survey questionnaire to the thesis supervisor and other panel members for feedback and suggestions for improvement. Furthermore, to ensure the quality and alignment of the statements with the study's subject matter, the researcher obtained content validation from principals, head teachers, and master teachers. Furthermore, prior to the main study, the researcher executed a pilot test using twenty (20) educators to assess the internal consistency of the instruments. The data collected during the pilot test was analyzed using Cronbach's Alpha.

The researcher followed Dean's office guidelines to ensure the idea under investigation is properly aligned on the objectives of the course and satisfies the prerequisites for the educational management degree.

The researcher sought permission to conduct the study; consequently, the researcher contacted the Dolores District supervisor and all school heads. Upon receiving approval of the authorization letter from the supervisor and school administrators, the researcher conducted her investigation by executing the following steps: Initially, the researcher sent the Google Form questionnaire link to the responders with the support of the school administrators. They were given a plenty of time for them to finish the questionnaire. The participant's responses were continually observed by the researcher.

The researcher started tabulating and analyzing the data acquired with assistance from her statistician as well as the Statistics Center at LSPU San Pablo, to which she transmitted a copy of the data matrix and other supporting documents to ensure that the data were correctly treated statistically.

The study employed several statistical methods, including mean, standard deviation, Pearson Product Moment Correlation Coefficient, and mediation analysis. Mean was used in solidifying the respondents' appraisal of continued professional development, teaching competency, and teacher self-efficacy. Standard deviation was utilized to assess the homogeneity and heterogeneity of replies to the items in the questions. Pearson Product-Moment Correlation Coefficient was employed to ascertain the association between the variables of the investigation at a 0.01 probability level. Lastly, mediation analysis was used to ascertain if teaching competency acts as a mediating variable between continued professional development and teacher self-efficacy. This methodology enabled the study to investigate the indirect effects and mechanisms by which professional development impacts teacher self-efficacy, offering profound insights into the structural linkages among variables.

2. Results and Discussion

Level of Continuing Professional Development of Teachers

The following tables illustrate the extent of continuing professional development for instructors regarding training and seminars, mentoring, research preparation, and graduate education or studies.

Table 1 Level of Continuing Professional Development of Teachers in terms of Trainings and Seminars

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>As I attend trainings and seminars, it...</i>			
1. fulfils my academic needs.	4.41	0.65	High Level
2. clarifies my understanding of implementing a formative evaluation plan in my class.	4.42	0.61	High Level
3. helps me in gaining new information and skills.	4.47	0.61	High Level
4. indicates important resources for my teaching.	4.44	0.60	High Level
5. motivates me to perform better in my job.	4.43	0.67	High Level
6. helps develop my teaching skills.	4.52	0.63	Very High Level
7. allows me to use audio-visual aids in a better way in my classroom situation.	4.42	0.64	High Level
8. provides career opportunities for me.	4.43	0.61	High Level
9. helps improve my overall performance in class.	4.48	0.64	High Level
10. develops better interaction between me and my students.	4.44	0.69	High Level
Overall	4.45	0.56	High Level
<i>Legend: 4.50-5.00 Very High Level 2.50-3.49 Moderate Level 1.00-1.49 Very Low Level</i> <i>3.50-4.49 High Level 1.50-2.49 Low Level</i>			

Table 1 illustrates the instructors' perceived degree of engagement in Continuing Professional Development (CPD), particularly regarding their involvement in training and seminars. The mean value of 4.45, with a standard deviation of 0.56, is regarded as a High Level, indicating that instructors consistently and actively engage in training and seminar events, perceiving these experiences as significantly beneficial to their professional development.

Among the ten listed statements, the highest mean is attained by the item "helps develop my teaching skills" with 4.52 mean and SD of 0.63, followed closely by "helps improve my overall performance in class" and "helps me in gaining new information and skills" with means of 4.48 and 4.47 respectively. These findings clearly indicate that teachers view seminars and training as important tool in developing both technical and instructional competencies. The mentioned activities are seen as tools for improving classroom delivery and acquiring updated pedagogical strategies.

Furthermore, items such as “*motivates me to perform better in my job*” and “*provides career opportunities for me*”, each with a mean of 4.43, indicate that beyond instructional advantages, CPD through training and seminars also fosters motivation and professional advancement. This aligns with the main purpose of CPD – to support both the growth of teaching proficiency and the holistic development of the educator.

The consistency of the means across all statements ranging from 4.41 to 4.52 show that teachers have high level regards on the benefits of different training opportunities they get to attend to. This suggests a school culture that promotes continuous learning and values the transformative impact of professional development in the classroom. It also reflects a self-directed and motivated teaching workforce, where educators do not see CPD as compliance, but an avenue for professional growth and excellence.

These findings are somewhat related to the study of Felix and Abrogena (2023) who conducted a survey among science teachers participating in CPD activities, particularly seminars and workshops and found out a significant relationship in their instructional performance and teaching self-efficacy. It was highlighted in their study that when teachers view CPD as relevant and supportive of their actual classroom practices, it becomes a key factor of teaching effectiveness.

Similarly, in the study of Bruna, et. al. (2023), they claimed that teacher training program significantly enhanced teacher knowledge, instructional practices, and self-efficacy. Teachers who participated in the program agreed that structured learning experiences is very much effective in improving their classroom delivery which is related to the findings of the current study where the respondents agreed that training helps them use audio-visual aids more effectively and indicates important resources for teaching.

To summarize, the data presented in Table 1 prove the importance of sustained, relevant, and accessible training and seminar programs as part of a teacher’s CPD. The very high level of engagement implies that teachers clearly understand its significance on their instructional and professional development. These findings call the need for educational institutions to invest in and prioritize CPD programs that are timely, practical, and responsive to the changing demands of the teaching profession.

Table 2 Level of Continuing Professional Development of Teachers in terms of Mentoring

Statements	Mean	Std. Deviation	Verbal Interpretation
As I participate in mentoring activities, it...			
1.helps me in gaining mastery over my subjects.	4.41	0.65	High Level
2. enables me to teach effectively.	4.40	0.62	High Level
3. assists me to identify and solve classroom problems.	4.44	0.63	High Level
4. prepares me for my professional growth.	4.52	0.63	Very High Level
5. teaches me to use teaching materials effectively.	4.42	0.64	High Level
6. creates a supportive and comfortable environment for my professional development.	4.39	0.62	High Level
7. promotes reflective thinking in me.	4.41	0.65	High Level
8. helps increase my teaching efficiency.	4.43	0.64	High Level
9. helps increase my confidence level through the continuous guidance from my mentor.	4.46	0.63	High Level
10. allows me to receive useful and timely feedback from my mentor.	4.39	0.63	High Level
Overall	4.43	0.56	High Level

Legend: 4.50-5.00 Very High Level 2.50-3.49 Moderate Level 1.00-1.49 Very Low Level 3.50-4.49 High Level 1.50-2.49 Low Level

Mentoring is essential for the ongoing professional growth of educators. Despite educational problems, mentoring, guidance, support, and clarification are offered to educators. The results in Table 2 demonstrate that educators hold mentoring activities in high esteem and acknowledge them as a crucial element for their professional development and instructional efficacy. The total mean is 4.43 with a standard deviation of 0.56, signifying that mentoring is assessed at a High Level, reflecting participants’ significant agreement on the significance of mentorship in their professional lives.

The item with highest mean of 4.52 and SD of 0.63 is “*prepares me for my professional growth*”, indicating that mentoring is seen as a forward-looking strategy for development, and not just as a tool to fix issues and challenges in the classrooms. Educators see mentorship as a bridge between where they are and they aspire to be professionally. Very close to this is the statement “*helps increase my confidence level through the continuous guidance from my*

mentor” which has a mean of 4.46 and SD of 0.63, highlighting how supportive relationships in mentoring boost teachers’ morale and self-efficacy which is a key variable in this study.

Additionally, teachers value mentoring for its practical benefits. For instance, “*assists me to identify and solve classroom problems*” with mean of 4.44 and “*helps increase my teaching efficiency*” with mean of 4.43 imply that mentoring enhances not only theoretical knowledge, but also day-to-day classroom effectiveness. These results show how mentors are seen as guides and problem-solvers who give effective solutions to real-world teaching scenarios.

Interestingly, even items like “*promotes reflective thinking in me*” with mean of 4.41 and “*creates a supportive and comfortable environment for my professional development*” with mean of 4.39 indicate that mentoring fosters a reflective and emotionally safe learning environment where teachers will most likely feel empowered to take risks, try new approaches, and embrace lifelong learning.

The findings are aligned with the study of Hobson and Maxwell (2020) who highlighted the significant impact of mentoring in the young teachers’ self-efficacy, resilience, and classroom management skills. Likewise, research by Wang, et.al (2021) claimed that mentoring holds significance for professional development as it enables contextualized, one-on-one support that directly impacts teaching performance and confidence.

Therefore, mentoring serves as an essential tool for teachers to grow in their profession and also offers structure and encouragement for them. If this will be well-implemented, it can nurture not only the teachers’ competence, but also their belief on their own ability to teach effectively, thereby fulfilling its mediating role in professional development and teaching efficacy.

Currently, engaging in research preparation is essential for Continuing Professional Development (CPD), as it enables educators to comprehend the significance of evidence-based practice and provides them with the tools to become reflective and inventive instructors. According to the results in Table 3, teachers exhibit a strong perception of their engagement in research preparation, reflected by an overall mean of 4.17 and a standard deviation of 0.65. The findings indicate that although educators acknowledge the significance of research-oriented activities, there remains an opportunity to enhance their engagement to a considerably higher level through a more engaging and contextualized support system.

The statement “*improves my ability to innovate in the classroom*” received the highest mean of 4.26 with a SD of 0.70. This entails that teachers see the role of research in stimulating creativity and fostering pedagogical innovations. Innovating classroom instructions is important to keep themselves abreast in the changing educational landscape, particularly in classrooms where there are diverse learners

and one-size fits all approaches are no longer that effective.

Table 3 Level of Continuing Professional Development of Teachers in terms of Teachers Research Preparation

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>As I engage in research preparation, it...</i>			
1.helps me appreciate the value of research in teaching.	4.13	0.70	High Level
2. motivates me to use research-based teaching techniques.	4.18	0.71	High Level
3. gives me the confidence to pursue research.	4.12	0.73	High Level
4. equips me with the tools I need to incorporate research in my classroom.	4.13	0.69	High Level
5. improves my ability to innovate in the classroom.	4.26	0.70	High Level
6. makes me feel more secure in undertaking action research.	4.16	0.73	High Level
7. teaches me how to use research results to improve student outcomes.	4.19	0.69	High Level
8. promotes collaboration in research efforts with colleagues.	4.19	0.69	High Level
9. encourages the use of research as the basis for teaching decisions.	4.17	0.69	High Level
10. helps me become confident in my ability to design and implement classroom research.	4.19	0.69	High Level
Overall	4.17	0.65	High Level

Legend: 4.50-5.00 Very High Level 2.50-3.49 Moderate Level 1.00-1.49 Very Low Level 3.50-4.49 High Level 1.50-2.49 Low Level

Three statements got the same mean of 4.19 and rated at high level – “teaches me how to use research results to improve student outcomes”, “promotes collaboration in research efforts with colleagues”, and “helps me become confident in my ability to design and implement classroom research”. These findings imply that teachers recognize its application in enhancing learning outcomes and fostering professional collaboration.

Despite high level results, some statements such as “gives me the confidence to pursue research” with mean of 4.12 and “equips me with tools I need to incorporate research in my classroom” with mean of 4.13 received slightly lower mean. The results suggest that while teachers are generally favorable toward research, some may still feel that they are lacking in terms of preparation and technical skills to convert research results into actionable classroom strategies.

These findings are related to the results of the study of Al-Fudail and Mellar (2019) who emphasized that while teachers agreed on the importance of research, it is necessary for them to have structured training and institutional support to confidently engage in classroom-based inquiry. In a similar manner, Nguyen, Walker, and Nguyen (2020) found that with proper research preparation, teachers are more confident to make decisions based on data which significantly contributes to enhanced teaching practices and learner outcomes.

Moreover, Borko, et. al. (2021) stated that when teachers experience research as a collaborative, empowering endeavor, and not as an academic task alone, their self-efficacy improves. In this way, research is seen on a different perspective and not just seen as a professional responsibility, but more importantly, as a transformative process, reinforcing the mediating role of self-efficacy in CPD.

In summary, the findings in Table 3, emphasize that research preparation is a key aspect of teacher professional development. With this, innovation, confidence, and collaboration are highlighted as important elements for maintaining teaching excellence in today’s fast-changing educational landscape. When given proper and effective support, research engagement may not only enhance teaching competency but also uplifts teachers’ belief in their own capabilities to create meaningful changes in their classrooms

Table 4 Level of Continuing Professional Development of Teachers in terms of Graduate Education or Graduate Studies

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>As I attend graduate education or studies, it...</i>			
1.inspires me to pursue graduate degrees to improve my teaching.	4.36	0.54	High Level
2. helps me advance my professional development.	4.41	0.53	High Level
3. encourages higher education options that are applicable to my teaching practice.	4.40	0.59	High Level
4. helps me feel motivated to pursue further education.	4.36	0.58	High Level
5. educates me about graduate education opportunities that can advance my career.	4.37	0.59	High Level
6. supports my decision to complete my education while teaching full-time.	4.35	0.59	High Level
7. helps me become more secure in my topic knowledge.	4.38	0.60	High Level
8. allows me to improve my teaching methods.	4.39	0.60	High Level
9. helps promote lifelong learning.	4.46	0.60	High Level
10. emphasizes the importance of advanced study in improving my teaching practice.	4.41	0.59	High Level
Overall	4.49	0.61	High Level

Legend: 4.50-5.00 Very High Level 2.50-3.49 Moderate Level 1.00-1.49 Very Low Level 3.50-4.49 High Level 1.50-2.49 Low Level

Table 4 provides a comprehensive overview of teachers’ self-perceived levels of professional development based on their engagement to graduate studies. The data reveal a High Level of continuing professional development with a mean of 4.49 and SD of 0.61. This suggests that teachers perceive their graduate education or studies as highly effective in enhancing professional competencies. The consistency on the results reflects a high level, positive, and unified perception among teachers regarding the benefits of advanced studies.

Graduate education remains as an important factor that inspires teachers to pursue further degrees, advancing their professional development, and motivating them to embrace lifelong learning. Teachers acknowledge that graduate studies provide them with confidence to expound their expertise on subject-matter, refine their teaching methodologies, and balance full-time teaching with continuing education. Furthermore, it equips educators with the tools to improve their teaching practices and emphasizes the importance of advanced study in their professional growth.

The results correspond with the research conducted by Boeskens, Nusche, and Yurita (2020), which highlighted the significance of ongoing professional development in expanding instructors' knowledge and addressing the evolving requirements of pupils. Their research underscores the significance of fostering collaborative school environments and facilitating collective enhancement within the teaching profession. Oestar (2022) examines the challenges and opportunities associated with teachers' professional development in the new normal, emphasizing the importance of monitoring and evaluation for facilitating effective professional progress. Furthermore, Ambon, Alias, and Mansor (2024) demonstrated the beneficial effect of Continuing Professional Development (CPD) on teaching quality by improving pedagogical skills and problem-solving abilities. The research cited collectively reinforce the transformative capacity of graduate education in improving teachers' self-efficacy and pedagogical competence.

These indicate that graduate education is a crucial element of teachers' ongoing professional development. It significantly enhances teachers' self-efficacy, pedagogical methods, and dedication to lifelong learning. Recent research corroborates the findings, emphasizing the essential significance of higher education in promoting professional development and enhancing teaching standards.

Extent of Teaching Competency

The tables below present the extent of teaching competency manifested by the respondents in terms of instructional planning, instructional skills, knowledge of the subject matter, rapport with the students and classroom management.

Table 5 Extent of Manifestation of Teaching Competency as Described by the Respondents in terms of Instructional Planning

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>I manifest my instructional planning skills by...</i>			
1. preparing a comprehensive, organized, and well-thought-of learning plan that includes varied instructional techniques and class activities.	4.37	0.52	Manifested
2. incorporating the use of different resources, technology or instructional materials to facilitate learning.	4.49	0.55	Manifested
3. creating opportunities for maximum participation of students.	4.47	0.54	Manifested
4. providing appropriate assessment tools as indicated in the learning plan.	4.35	0.55	Manifested
5. thinking of creative and varied activities to differentiate my instructions.	4.43	0.53	Manifested
6. constructing lesson plans that promote critical thinking and problem solving.	4.47	0.55	Manifested
7. becoming confident in creating lesson plans that facilitate student learning.	4.42	0.56	Manifested
8. creating lesson plans that effectively fit with curriculum standards.	4.43	0.56	Manifested
9. addressing the diverse needs of my students.	4.35	0.55	Manifested
10. regularly revising my educational plans based on student performance.	4.40	0.56	Manifested
Overall	4.39	0.50	Manifested

Legend: 4.50-5.00 Very High Extent/Highly Manifested 1.50-2.49 Low Extent/ Rarely Manifested

3.50-4.49 High Extent/ Manifested 1.00-1.49 Very Low Extent/Not Manifested 2.50-3.49 Moderate Extent/Moderately Manifested

Table 5 has a detailed assessment of respondents' perceptions of their instructional planning skills. The data show an overall mean of 4.39 with a standard deviation of 0.50, interpreted as "Manifested." This ideally means that respondents consider themselves highly competent in instructional planning. Similar to the previous table, each statement in this area consistently falls under "Manifested" which means that the respondents are in constant and unified agreement regarding their instructional planning abilities.

The findings highlight several key aspects of instructional planning where respondents agreed that they are capable of *preparing comprehensive and organized learning plans that incorporate varied instructional techniques and class activities*, having a mean of 4.37 and SD of 0.52. With the highest mean of 4.47, they demonstrate exceptional confidence in their capacity to amalgamate various resources, including technology and instructional

materials, to enhance learning effectively, as well as in developing lesson plans that foster critical thinking and problem-solving, align with curriculum standards, and cater to the diverse needs of students. Moreover, with a mean of 4.40 and a standard deviation of 0.56, respondents concur that they possess the ability to modify educational plans in accordance with student achievement, hence facilitating ongoing enhancement in instructional planning.

The aggregate mean of 4.39 indicates a high degree of teaching proficiency in instructional planning among the respondents. This signifies the teachers' preparedness and eagerness to devise and execute effective strategies for diverse facets of student learning and engagement. The results are connected to current research emphasizing the significance of instructional planning in improving teaching proficiency. The study by Darling-Hammond et al. (2019) highlights the essential function of instructional planning in enhancing successful teaching practices and student outcomes. Kraft and Papay (2020) also underscored the importance of synchronizing instructional preparation with professional development to improve teaching quality. These findings serve as catalysts for the notion that effective instructional planning might enhance teaching proficiency and educational results.

In conclusion, the study reveals that instructional planning is an essential element of teaching proficiency. The elevated mean across all assertions indicates the respondents' robust agreement regarding their instructional planning capabilities, underscoring their dedication to formulating and executing successful instructional strategies.

Table 6 indicates an overall mean of 4.42 and a standard deviation of 0.45, read as "Manifested." This suggests that the respondents regard themselves as exceptionally proficient in diverse educational skills.

The item "offering opportunities for students to demonstrate evidence of learning, such as performance tasks and engaging in question-and-answer sessions," got the highest mean score of 4.50. This illustrates the educators' significant focus on student-centered assessment methods, enabling learners to exhibit comprehension through substantive outputs and active engagement. This approach fosters genuine learning, consistent with the conclusions of Kiemer et al. (2021), who emphasized the significance of performance-based assessment in cultivating enhanced engagement and understanding.

Subsequently, items include "utilizing diverse pedagogical approaches and learning experiences to cater to the multiple intelligences of students" ($M = 4.47$, $SD = 0.54$) and "delivering lessons in a clear, concise, and logical format" ($M = 4.46$, $SD = 0.54$). These outstanding results demonstrate the teachers' diverse teaching methods and clarity in content delivery, enabling them to address a broad spectrum of learning needs while enhancing retention of concepts. These competencies align with Tomlinson's (2021) diversified education paradigms, which promote diverse pedagogical strategies to effectively address the needs of all learners.

Table 6 Extent of Manifestation of Teaching Competency as Described by the Respondents in terms of Instructional Skills

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>I manifest my instructional skills by...</i>			
1. communicating proficiently in English and Filipino	4.42	0.56	Manifested
2. displaying enthusiasm in teaching.	4.44	0.53	Manifested
3. presenting lesson in clear, concise and logical manner.	4.46	0.54	Manifested
4. asking higher order thinking skills (HOTS) and metacognitive questions to encourage students to think and to teach students how to learn.	4.38	0.57	Manifested
5. making use of different teaching methods and learning experiences to address multiple intelligences of students.	4.47	0.54	Manifested
6. giving immediate positive comments and feedback.	4.41	0.55	Manifested
7. integrating and processing values as shown in lesson development or closing activities in the synthesis.	4.44	0.53	Manifested
8. summarizing the lesson comprehensively using appropriate methods.	4.43	0.55	Manifested
9. utilizing indicated assessment tools in the learning plan.	4.47	0.55	Manifested
10. providing opportunities for students to show evidence of learning like performance tasks, asking and answering questions, etc.	4.50	0.54	Manifested
Overall	4.42	0.45	Manifested

Legend: 4.50-5.00 Very High Extent/Highly Manifested 1.50-2.49 Low Extent/ Rarely Manifested 3.50-4.49 High Extent/ Manifested 1.00-1.49 Very Low Extent/Not Manifested 2.50-3.49 Moderate Extent/Moderately Manifested

Statements such as "exhibiting enthusiasm in teaching" ($M = 4.44$), "summarizing the lesson comprehensively using suitable methods" ($M = 4.47$), and "integrating and processing values as demonstrated in lesson development or closing activities in the synthesis" ($M = 4.43$) reflect a dedication to

sustaining student engagement and incorporating values education into content instruction—crucial for character development and reflective learning. The practice of "posing higher-order thinking skills (HOTS) and metacognitive questions to stimulate student thought and instruct them in learning methodologies" has a mean score of 4.38, suggesting that, although this approach is implemented, there remains significant potential for enhancement in promoting critical and metacognitive thinking. Research conducted by van Laar et al. (2020) underscores the significance of Higher Order Thinking Skills (HOTS) in developing 21st-century competencies in students.

The overall findings confirm that instructional skills are an essential component of teaching proficiency. The respondents' high ratings across most parameters reflect their proficiency in effective communication, diverse teaching tactics, and engaging classroom practices. Nonetheless, the significantly lower scores in assessment integration and advanced questioning strategies emphasize critical areas for future professional development. Continuous training in evaluation literacy and strategic questioning could help to improve instructional effectiveness.

Table 7 Extent of Manifestation of Teaching Competency as Described by the Respondents in terms of Knowledge of the Subject Matter

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>I manifest my knowledge of the subject matter by...</i>			
1. demonstrating thorough concepts and principles in the assigned subject.	4.42	0.56	Manifested
2. integrating the subject matter with other subjects.	4.44	0.53	Manifested
3. including relevant current topics and issues related to the lesson or topic taught.	4.46	0.54	Manifested
4. communicating complex subjects to my students.	4.38	0.57	Manifested
5. tying up subject information to real-world applications.	4.47	0.54	Manifested
6. engaging pupils in meaningful debates.	4.41	0.55	Manifested
7. addressing students' inquiries about the subject matter.	4.44	0.53	Manifested
8. applying topic principles to real-world circumstances to promote students' critical thinking.	4.43	0.55	Manifested
9. incorporating new material and developments in my subject into the lessons.	4.47	0.55	Manifested
10. improving my students' comprehension of the information.	4.50	0.54	Highly Manifested

Legend: 4.50-5.00 Very High Extent/Highly Manifested 1.50-2.49 Low Extent/ Rarely Manifested 3.50-4.49 High Extent/ Manifested 1.00-1.49 Very Low Extent/Not Manifested 2.50-3.49 Moderate Extent/Moderately Manifested

Table 7 addressed the respondents' perceptions regarding their competency in subject matter knowledge. The overall mean of 4.44 and SD of 0.46 categorized as "Manifested" shows that the respondents believe in their ability to demonstrate mastery of the subject matter.

Among the statements, "improving students' comprehension of the information," got the highest mean of 4.50, reveals strong effort in ensuring that students grasp key concept effectively. Followed by "incorporating new material and developments in my subject into the lessons" and "tying up subject information to real-world applications" with the mean of 4.47. This indicates a potential area for improvement, as staying updated with recent advancements is crucial for maintaining relevance in teaching practices and reflect respondents' ability to connect theoretical knowledge with practical applications.

"Communicating complex subjects to my students" got the lowest mean of 4.38 emphasizing the importance of simplifying complex topics for better student comprehension. Followed by "engaging pupils in meaningful debates" with the mean of 4.41, which suggest an opportunity to enhance interactive and participatory teaching methods.

The findings underscore the essential importance of subject matter knowledge in teaching proficiency. Recent research, such those by Ruoxuan Li et al. (2022), underscore the significance of subject area expertise in improving teaching quality and student outcomes. Their study emphasizes the necessity of ongoing professional development to ensure teachers remain informed about the newest breakthroughs in their disciplines. Yoo (2016) emphasizes the importance of connecting subject matter expertise with effective pedagogical methods to guarantee quality education. Both projects require robust subject matter expertise to address various educational problems and enhance student learning outcomes.

To conclude, subject matter knowledge is considered a dynamic and essential aspect of teaching competency, enabling educators to respond effectively to the diverse needs of students. The respondents' high self-assessment scores is a good indicator of strong commitment to maintaining subject matter mastery, encouraging active student engagement and embracing innovative strategies to enhance learning experiences. With support from recent researches, the findings showcase how subject matter knowledge serves as a cornerstone for effective teaching, ensuring continuous improvement, and fostering meaningful connections between educators and learners.

Table 8 Extent of Manifestation of Teaching Competency as Described by the Respondents in terms of Rapport with Students

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>I establish rapport with my students by...</i>			
1. showing respect for students' ideas and opinions.	4.62	0.56	Highly Manifested
2. using appropriate language and speaking in a non- threatening manner.	4.55	0.57	Highly Manifested
3. building a positive relationship with my students and encourage open conversation.	4.59	0.55	Highly Manifested
4. communicating complex subjects to my students.	4.49	0.57	Manifested
5. fostering a friendly classroom environment in which students feel valued.	4.60	0.54	Highly Manifested
6. actively listening to my students and address their needs and interests.	4.59	0.55	Highly Manifested
7. developing trust and respect between myself and my students.	4.60	0.56	Highly Manifested
8. exhibiting care and compassion when students struggle with their studies.	4.58	0.55	Highly Manifested
9. regularly providing students constructive feedback for improvement.	4.55	0.55	Highly Manifested
10. encouraging a sense of belonging and inclusion for all students in the classroom.	4.61	0.54	Highly Manifested
Overall	4.58	0.49	Highly Manifested

Legend: 4.50-5.00 Very High Extent/Highly Manifested 1.50-2.49 Low Extent/ Rarely Manifested

3.50-4.49 High Extent/ Manifested 1.00-1.49 Very Low Extent/Not Manifested 2.50-3.49 Moderate Extent/Moderately Manifested

Table 8 earned an overall mean of 4.58, with a standard deviation of 0.49, which is categorized as a "highly manifested." This result reflects the respondents' capability to foster positive relationships with students, which is another important component of teaching competency.

Among the statements, the highest mean is 4.62 for "*showing respect for students' ideas and opinions*," highlighting the respondents' emphasis on creating an inclusive and respectful classroom environment. This suggests that teachers value the students' perspectives the most, which plays an important role in building trust and encouraging active participation. In a similar manner, "*exhibiting care and compassion when students struggle with their studies*" received a high mean of 4.58, giving great importance in empathy in establishing meaningful connections with students.

While "*using appropriate language and speaking in a non-threatening manner*" and "*regularly providing students constructive feedback for improvement*" got the lowest mean of 4.55, they still got the interpretation "highly manifested" which indicates that the respondents also importance on these aspects, but can still improve. Admittedly, the respondents agreed that the aforementioned actions can help promote inclusivity, hence, will create a supportive learning environment for the students.

The aforementioned findings unequivocally illustrate the significance of rapport in instructional efficacy. Recent study offers valuable insights into these subjects. Klassen et al. (2018) emphasize the importance of teacher-student relationships in enhancing student engagement and academic success. Their study underscores the significance of continuous professional development to enhance interpersonal skills and effectively establish rapport. Zee and Koomen (2016) emphasize the significance of teacher self-efficacy in fostering a positive classroom atmosphere and enhancing student well-being. Both findings underscore the significance of strong rapport in addressing diverse educational challenges and facilitating optimal student learning.

In conclusion, rapport with students emerges as a dynamic and essential part of teaching competency, allowing educators to effectively respond to their students' different needs. The responders' high self-assessment scores demonstrate a strong dedication to sustaining healthy connections, fostering active student engagement, and implementing new techniques to improve learning experiences. These findings, supported by current research, demonstrate how rapport serves as a foundation for effective teaching, enabling continual progress and building meaningful relationships between educators and learners.

Table 9 Extent of Manifestation of Teaching Competency as Described by the Respondents in terms of Classroom Management

Statements	Mean	Std. Deviation	Verbal Interpretation
<i>I manage my class by...</i>			
1.ensuring a suitable learning environment at all times.	4.57	0.55	Highly Manifested
2. carrying out routine procedures effectively.	4.54	0.55	Highly Manifested
3. maintaining discipline in the class at all times.	4.55	0.55	Highly Manifested
4. controlling time through meaningful activities or interactions.	4.54	0.54	Highly Manifested
5. establishing clear expectations for student behavior at the start of each term.	4.52	0.55	Highly Manifested
6. regulating classroom interruptions while maintaining the flow of the course.	4.50	0.55	Highly Manifested
7. setting up a disciplined learning environment in which students understand their obligations.	4.54	0.55	Highly Manifested
8. using positive reinforcement to encourage appropriate behavior from my students.	4.50	0.55	Highly Manifested
9. handling conflicts between students calmly and fairly.	4.56	0.55	Highly Manifested
10. striking a balance between regulating student behavior and being focused on learning objectives.	4.49	0.57	Manifested
Overall	4.53	0.48	Highly Manifested

Legend: 4.50-5.00 Very High Extent/Highly Manifested 1.50-2.49 Low Extent/ Rarely Manifested 3.50-4.49 High Extent/ Manifested 1.00-1.49 Very Low Extent/Not Manifested 2.50-3.49 Moderate Extent/Moderately Manifested

he table shows how respondents perceive their teaching competency in terms of classroom management. The mean of 4.53, with a standard deviation of 0.48, indicates that they are competent in this field to a "highly manifested". The data show that respondents believe they can effectively control their classrooms, creating a climate favorable to learning and teaching.

Among the statements, "*Ensuring a suitable learning environment at all times*" had the highest mean of 4.57. This emphasizes educators' role in establishing places in which students feel engaged and secure, as well as the importance of preserving order and minimizing interruptions. Similarly, a mean of

4.56 for "*Handling conflicts between students calmly and fairly*" highlights their capacity to actively manage disputes, ensuring classroom unity is maintained.

At the same time, there are areas with slightly lower means, but still within commendable ranges. For example, the ability to "Regulate interruptions during class discussions" received a mean rating of 4.50. This highlights a potential area for improvement, as efficiently handling interruptions is critical to maintaining the flow of learning. Furthermore, balancing behavior regulation and fulfilling learning objectives provides another opportunity for growth.

To provide a broader perspective for these findings, Granada and Oco's (2024) research emphasizes how structured classroom management strategies improve not only teaching effectiveness, but also student engagement. Their research highlights techniques such as proactive planning, positive reinforcement, and routine procedure implementation as important factors to good classroom management. Similarly, Bauersfeld et al. (2025) describe how persistent participation in reflective and professional development programs enables teachers to gradually strengthen and perfect their classroom management skills over time.

In essence, the statistics show that respondents thrive at creating orderly and responsive classroom settings. However, there is still room for improvement, notably in dealing with interruptions and striking the right balance between discipline and learning. The research provided support the idea that ongoing learning and reflection are essential for improving this critical feature of teaching competency.

Level of Teachers' Self-efficacy

The table show the level of teachers' self-efficacy as perceived by the respondents.

Table 10, entitled Level of Teachers' Self-Efficacy as Perceived by the Respondents, offers comprehensive insights into the respondents' self-assessment of their self-efficacy. The mean is 4.25, with a standard deviation of 0.55, classified as "High Level." This outcome indicates the respondents' assurance in their capacity to adeptly handle teaching-related issues and sustain a constructive learning atmosphere.

The highest mean among the statements is 4.35 for "To what extent can you assist your students in valuing learning." This signifies that respondents possess confidence in their ability to impart the value of learning to their students, which is essential for motivation and engagement. Likewise, "How much can you do to instill in students the belief that they can excel in their academic endeavors" garnered a mean score of 4.32, reflecting their perceived effectiveness in enhancing students' self-esteem and academic confidence.

The lowest mean is 4.13 for the question, "How much can you do to control disruptive behavior in the classroom?" Although categorized as "High Level," this indicates a possible area for enhancing the management of classroom disruptions. A further statement with somewhat low scores is "To what extent can you aid families in supporting their children's academic success," which has a mean score of 4.19.

Table 10 Level of Teachers' Self-efficacy as Perceived by the Respondents

Statements	Mean	Std. Deviation	Verbal Interpretation
1.How much can you do to control disruptive behavior in the classroom?	4.13	0.65	High Level
2. How much can you do to motivate students who show low interest in school work?	4.27	0.63	High Level
3. How much can you do to get students to believe they can do well in school work?	4.32	0.66	High Level
4. How much can you do to help your students value learning?	4.35	0.68	High Level
5. To what level can you craft good questions for your students?	4.24	0.62	High Level
6. How much can you do to get children to follow classroom rules?	4.31	0.67	High Level
7. How much can you do to calm a student who is disruptive or noisy?	4.22	0.68	High Level
8. How well can you establish a classroom management system with each group of students?	4.24	0.63	High Level
9. How much can you use a variety of assessment strategies?	4.19	0.68	High Level
10. To what level can you provide an alternative explanation or example when students are confused?	4.27	0.60	High Level
11. How much can you assist families in helping their children do well in school?	4.19	0.64	High Level
12. How well can you implement alternative strategies in your classroom?	4.27	0.65	High Level
Overall	4.25	0.55	High Level

Legend: 4.50-5.00 Very High Level 2.50-3.49 Moderate Level 1.00-1.49 Very Low Level 3.50-4.49 High Level 1.50-2.49 Low Level

The statements with moderate scores, including "To what extent can you formulate effective questions for your students" (4.24) and "How proficiently can you implement a classroom management system with each group of students" (4.24), underscore respondents' capabilities to promote organized and reflective interaction with students. Recent studies corroborate these findings.

Klassen et al. (2020) emphasize the significance of self-efficacy in improving teacher effectiveness, resilience, and the capacity to adeptly address classroom challenges. Tschannen-Moran and Hoy (2018) underscore that fostering self-efficacy contributes to classroom peace and enhances student achievement, particularly in cultivating skills such as managing disruptions and engaging with families. The statistics indicate that respondents exhibit a

"Very High Level" of self-efficacy in most relevant items, showcasing robust talents in promoting student success, managing classrooms, and facilitating active involvement.

The results underscore the necessity for focused interventions in managing disruptive behaviors and engaging with families to improve teacher effectiveness. These observations highlight the crucial importance of self-efficacy in teaching competency and its capacity to facilitate significant enhancements in educational outcomes.

Test of Relationship of Continuing Professional Development with Teaching Competency and Teachers' Self-Efficacy

The tables below present the relationship of continuing professional Development with teaching competency and teachers' self-efficacy

Table 11 Correlation Between Continuing Professional Development and Teaching Competency

Indicators	Instructional Planning	Instructional Skills	Knowledge of the Subject Matter	Rapport with the Students	Classroom Management
Trainings and Seminars	0.697**	0.599**	0.627**	0.604**	0.628**
Mentoring	0.634**	0.610**	0.661**	0.658**	0.660**
Teachers' Research Preparation	0.556**	0.451**	0.450**	0.427**	0.429**
Graduate Education/Studies	0.531**	0.528**	0.521**	0.595**	0.535**

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

The table above displays the Pearson correlation coefficients among different Continuing Professional Development (CPD) activities and the domains of teaching competency, namely instructional planning, instructional skills, subject matter knowledge, student rapport, and classroom management. All correlations are significant at the 0.01 level (2-tailed), demonstrating a statistically significant positive association between CPD activities and teaching competencies. Among the CPD activities, training and seminars exhibited the most robust positive correlation across all skill domains, particularly with instructional planning ($r=.697^{**}$), classroom management ($r=.628^{**}$), and subject matter expertise ($r=.627^{**}$). This indicates that teachers' participation in structured training sessions and seminars markedly enhances their lesson planning, classroom management, and material delivery skills. Mentoring also showed strong correlations, with the highest observed in classroom management ($r=.660^{**}$) and rapport with students ($r=.658^{**}$). These findings indicate that mentorship, which often involves professional guidance and feedback from more experienced educators, equips teachers not only with technical skills but also with the relational and interpersonal capabilities necessary for creating a positive classroom environment. The significance of teachers' research preparation, though slightly lower in strength, also correlates positively with all competency domains, particularly instructional planning ($r=.556^{**}$) and instructional skills ($r=.451^{**}$). This highlights the reflective and evidence-based advantages teachers gain when they are involved in research-oriented activities. Lastly, graduate studies showed meaningful but slightly lower correlations, with the highest observed in rapport with students ($r=.595^{**}$) and instructional planning ($r=.531^{**}$), underscoring the long-term impact of advanced studies on pedagogical depth and learner engagement.

The results confirm the mediation influence of teachers' self-efficacy on continuous professional development involvement and teaching proficiency. When educators possess confidence in their competencies, they are more inclined to implement the skills and knowledge acquired via Continuing Professional Development (CPD) in practical and effective manners. Yoon and Goddard (2023) demonstrate that teacher self-efficacy substantially mediates the connection between the quality of professional development and instructional effectiveness. Their research highlights that professional learning events improve instructional practices solely when they also elevate teachers' confidence in their teaching abilities. In a similar vein, Yang (2019), utilizing the Teaching and Learning International Survey (TALIS) dataset, discovered that professional development correlates favorably with teacher self-efficacy, particularly when the continuing professional development (CPD) activities are pertinent, practical, and prolonged. This underscores the necessity of developing CPD programs that are not solely theoretical but are intricately connected to the classroom environment.

Furthermore, the findings of Salari and Farahian (2023) reveal a nuanced view of how metacognitive awareness mediates the effect of self-efficacy and professional development, especially among EFL teachers. This suggests that professional growth is a layered process, where confidence, reflection, and continuous learning intertwine. The research of Felix and Abrogena (2023) also validates the present findings, highlighting that science teachers who engage in CPD report higher self-efficacy and improved instructional performance. This echoes the pattern observed in the data: as teachers engage in CPD, whether through training, mentoring, research, or further studies, they strengthen their belief to teach effectively, which in turn enhances their actual teaching competencies.

Table 12 Correlation Between Continuing Professional Development and Teachers' Self-efficacy

Indicators	Teachers' Self Efficacy
Trainings and Seminars	0.584**
Mentoring	0.579**
Teachers' Research Preparation	0.467**
Graduate Education/Studies	0.488**

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

Table 12, titled "Correlation Between Continuing Professional Development (CPD) and Teachers' Self-Efficacy," shows significant correlations between different CPD activities and teachers' self-efficacy. Specifically, the statistics show substantial positive associations across all evaluated CPD dimensions. These data imply that instructors who participate in more CPD activities have higher self-efficacy. Notably, 'Trainings and Seminars' and 'Mentoring' have the highest correlations of 0.584**, highlighting their critical significance in increasing teachers' confidence and efficacy in their professional duties.

The robust correlation between Trainings and Seminars and self-efficacy aligns with the findings of Ambon et al. (2024), who conducted a comprehensive evaluation demonstrating that Continuing Professional Development significantly enhances teaching quality by improving pedagogical skills and classroom problem-solving capabilities. Their findings emphasize that structured training programs provide teachers with practical strategies and knowledge, hence augmenting their confidence and pedagogical skills.

Self-efficacy, as articulated by Bandura, refers to an individual's conviction in their capacity to execute the actions necessary to attain specific performance objectives. In the teaching profession, elevated self-efficacy correlates with enhanced resilience, pedagogical inventiveness, and a proactive stance towards student challenges (Tschannen-Moran & Hoy, 2020). In Philippine schools, the Department of Education-mandated Learning Action Cell (LAC) meetings function as localized, school-based training platforms for teachers to collaboratively address instructional challenges. Educators who engage in peer coaching, study, and reflection demonstrate enhanced clarity, confidence, and professional identity, indicative of elevated self-efficacy.

Bahauddin et al. (2023) identified a significant correlation between mentorship and self-efficacy in their examination of teachers' perceptions on the influence of CPD on teaching competencies. Their research indicated that mentorship programs substantially enhance teachers' professional development by offering customized coaching and support that refine teaching techniques and classroom management abilities.

The relationship between Teachers' Research Preparation and Self-efficacy suggests that engagement in research activities enables educators to critically evaluate and enhance their instructional methods. Aishath et al. (2021) found a positive correlation between lecturers' participation in research-oriented professional development activities and their teaching effectiveness in higher education environments. Finally, the link between Graduate Education/Studies and self-efficacy suggests that advanced academic pursuits improve teachers' professional confidence and effectiveness. According to Dayagbil and Alda (2024), instructors who pursue graduate degrees experience a considerable improvement in their teaching competencies, which they attribute to the additional knowledge and critical thinking skills they gain during their studies.

To summarize, the data in Table 12 clearly demonstrate that different CPD activities greatly contribute to the development of teachers' self-efficacy. The strength of this relationship reinforces the necessity for educational institutions to invest in a wide range of CPD options, such as formal training, mentoring, collaborative learning sessions like LACs, research participation, and advanced studies. Empowering teachers through these channels not only improves classroom effectiveness, but also fosters lifelong learning and professional development, resulting in a more resilient and inventive educational workforce.

Test of Relationship Between Teachers' Self-efficacy and Teaching Competency

The table below presents the relationship of teachers' self-efficacy with teaching competency.

Table 13 Correlation of Teachers' Self-efficacy and Teaching Competency

	Instructional Planning	Instructional Skills	Knowledge of Subject Matter	Relationship with Students	Classroom Management
Teachers' Self Efficacy	0.695**	0.671**	0.669**	0.715**	0.736**

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

Table 13, entitled "Correlation of Teachers' Self-Efficacy and Teaching Competency," illustrates robust, statistically significant positive correlations between teachers' self-efficacy and five principal domains of teaching competency: Instructional Planning ($r = .695$), Instructional Skills ($r = .671$), Subject Matter Knowledge ($r = .669$), Student Relationship ($r = .715$), and Classroom Management ($r = .736$), all significant at the 0.01 level. These data collectively indicate that an increase in instructors' confidence correlates with enhanced performance in essential teaching domains. The

correlation between self-efficacy and instructional planning ($r = .695$) indicates that teachers with confidence in their capabilities excel at creating and organizing lesson plans. Instructional planning requires foresight, alignment of materials with learning objectives, and anticipation of student reactions. Educators possessing elevated self-efficacy engage in more strategic planning, emphasizing student diversity, learning objectives, and the integration of assessments.

Khanshan and Yousefi (2020) substantiate this connection, revealing that self-efficacious educators excel in developing coherent, individualized instruction that meets the needs of various learners. In actual educational environments, these educators often engage in collaborative lesson preparation during Learning Action Cell (LAC) meetings, offering innovative concepts and effectively communicating instructional methodologies grounded in research or classroom experience.

The correlation between self-efficacy and instructional skills ($r = .671$) indicates that confident educators not only design effective plans but also execute exemplary lessons. Instructional competencies encompass effective communication, appropriate questioning techniques, engagement methods, and formative assessment—skills necessitating both expertise and assurance to execute dynamically across diverse classroom environments.

Handrianto et al. (2024) discovered that educators with elevated self-efficacy are more inclined to employ interactive teaching techniques and modify their strategies during lessons in response to student feedback. In practice, these educators employ diverse pedagogical techniques, routinely evaluate comprehension, and engage students with enthusiasm and clarity—actions that directly demonstrate their instructional proficiency. A considerable association exists between self-efficacy and subject matter knowledge ($r = .669$), implying that teachers with high self-belief are more confident in their grasp and delivery of subject material. This confidence frequently leads to deeper studies of issues, richer classroom conversations, and a willingness to answer complicated student queries. Handrianto, et al. (2024) stressed that self-efficacy drives continuing content knowledge improvement, with confident teachers more likely to participate in academic reading, pursue graduate degrees, and attend subject-specific training—all of which benefit student learning.

The positive association between self-efficacy and student relationship ($r = .715$) suggests that teachers who believe in their ability to educate effectively are also better at developing rapport with students. Effective student-teacher relationships are founded on trust, mutual respect, and consistent communication, all of which are bolstered by a teacher's emotional and professional self-assurance. Lauermann and ten Hagen (2021) contend that self-efficacious teachers are more empathic, compassionate, and proactive in dealing with student issues, resulting in healthier classroom climates and better student outcomes. Teachers with great rapport frequently utilize inclusive language, incorporate student interests into courses, and create psychologically safe learning environments.

The strongest link is seen between self-efficacy and classroom management ($r = .736$). This suggests that teachers with a strong sense of competence are more effective at maintaining discipline, structuring learning environments, and responding constructively to misbehavior. These teachers are more likely to regularly enforce regulations and utilize preemptive strategies to reduce disruptions. Shah (2023) underlines that confident teachers exhibit calm assertiveness and are more likely to use positive behavior support systems, resulting in improved student behavior and learning attention. Because of their demonstrated ability to effectively manage both students and peer dynamics, these instructors are frequently used as team leaders or LAC facilitators in public schools.

The results of Table 13 clearly demonstrate that teacher self-efficacy is critical in improving several dimensions of teaching ability. Teachers who are confident in themselves are better planners, communicators, content specialists, connection builders, and classroom managers. These findings highlight the need of incorporating self-efficacy-building tactics into teacher development programs, such as mentorship, reflective practice, collaborative professional learning communities (PLCs), and LACs. Empowering teachers to trust in their own strengths can have a positive ripple effect in schools, promoting both teacher and student success. Educational leaders and legislators should emphasize CPD efforts that directly target teacher efficacy in order to improve overall instructional quality.

Mediation Analysis of Teachers' Self-efficacy between Continuing Professional Development and Teaching Competency

The succeeding table presents the mediating relationship of teachers' self-efficacy between continuing professional development and teaching competency

Table 14 Mediation of Teachers' Self-efficacy on Professional Development and Teaching Competency

	coeff	se	t	p	LLCI	ULCI
CPD -- TSE	0.6437	0.0809	7.9587	0.0000	0.4835	0.8040
TSE -- TC	0.4135	0.0486	8.5132	0.0000	0.3173	0.5098
Direct	0.3275	0.0519	6.3133	0.0000	0.2247	0.4303
Indirect	0.2662	0.0519			0.1704	0.3730
Total	0.5937	0.0531	11.1867	0.0000	0.4886	0.6989

The table illustrates the mediating role of teachers' self-efficacy (TSE) in the relationship between ongoing professional development (CPD) and teaching competency. The results indicate a significant mediating impact, illustrating how CPD indirectly affects teaching competency through self-efficacy.

The mediation analysis indicates that the direct effect of CPD on teaching competency, labeled as "Direct" in the table, has a coefficient of 0.3275, a standard error (SE) of 0.0519, and a statistically significant t-value of 6.3133 ($p = 0.0000$). This demonstrates a robust and unequivocal connection between ongoing professional development and teaching proficiency.

The indirect effect of CPD on teaching competency, mediated by teachers' self-efficacy, is 0.2662, with a lower-level confidence interval (LLCI) of 0.1704 and an upper-level confidence interval (ULCI) of 0.3730, indicating significance within this range. This underscores the importance of self-efficacy in translating the advantages of CPD into enhanced teaching skills.

The cumulative effect, encompassing both direct and indirect influences, is 0.5937, showing CPD's substantial overall impact on teaching competency. The elevated Sobel test result, derived from the mediation data but not explicitly shown, enhances the statistical significance of instructors' self-efficacy as a mediating variable. The Sobel test is a tool for assessing the importance of the mediating influence of instructors' self-efficacy on a variable.

These results align with contemporary research. Li et al. (2022) emphasize the significance of self-efficacy as a mediator in the correlation between professional development programs and teacher performance outcomes. They propose that CPD programs enhance instructors' self-efficacy, resulting in improved pedagogical practices. Moreover, Cadungog (2019) underscores the role of self-efficacy in connecting professional development and competency, highlighting its significance in achieving sustained excellence in teaching.

In conclusion, the data provide persuasive evidence that instructors' self-efficacy plays an important mediating role in the link between CPD and teaching competency. While CPD directly improves teaching competency, the indirect pathway through self-efficacy multiplies its influence, making self-efficacy an important aspect in professional development. These findings highlight the importance for educational institutions to focus not just on CPD programs, but also on activities that promote teacher self-efficacy in order to construct a comprehensive approach to competency development.

3. Recommendations

In the light of relevant findings of the study and conclusions drawn, the following recommendations are offered:

School administrators may create and execute CPD programs that are strategically matched with the current demands of classroom instruction. These programs may be practical, content-specific, and based on contemporary teaching techniques. Regular and well-structured training sessions, mentorship opportunities, research participation, and graduate education must be made available and relevant to teachers' daily experiences. Mentoring may be institutionalized because of its association with teachers' ability to manage classrooms and cultivate positive connections with students, both of which are critical elements of effective teaching.

Teachers are urged to engage proactively in diverse professional development initiatives. Instructors, acknowledging the significance of professional development opportunities, may seek programs that enhance their instructional skills while also fostering their confidence and self-efficacy. By integrating CPD findings into their pedagogical methods, educators can enhance the quality of learning experiences for their students. **Students**, as the primary beneficiaries of greater teaching ability, are more likely to receive engaging, adaptable, and impactful instruction when teachers receive enough professional development support. As teachers gain confidence and competence, classrooms become more student-centered and conducive to meaningful learning, which improves student motivation and academic outcomes. Thus, schools may establish a culture that values and invests in professional development as a fundamental strategy for promoting student performance.

For future researchers, the present work may serve as a robust basis for further research. Future researchers may investigate more potential mediators or moderators of the association between CPD and teaching effectiveness, including teaching experience, school atmosphere, or leadership support. Longitudinal research designs can be beneficial in evaluating the enduring effects of Continuing Professional Development on teacher efficacy and student progress. Leveraging the established connections among CPD, self-efficacy, and competency, researchers could formulate more focused, evidence-based interventions that facilitate continuous teacher enhancement.

References:

- Achenushure, M., Kutsyuruba, B., & Walker, K. (2020). Mentoring practices in international contexts: A systematic review of the literature. *International Journal of Educational Research*, 102, 101602.
- Ahmad, I. (2018). Teacher-student relationship: Importance and impact on students' academic and behavioral outcomes. *International Journal of Education and Development*, 38(3), 45–57.
- Aishath, Z., Omar, I. M., & Aishath, W. (2021). Correlation between lecturers' professional development activities and their competencies in Maldives higher education institutes. *International Journal of Learning, Teaching and Educational Research*, 20(9), 14–29. <https://doi.org/10.26803/ijlter.20.9.2>
- Akil, M., & Jafar, B. (2019). Teacher self-efficacy and its impact on teaching effectiveness: A review of literature. *Journal of Education and Practice*, 10(15), 82-87. <https://doi.org/10.7176/JEP>
- Alemayehu, G. (2021). Action research: A critical approach to teacher professional development. *Journal of Education and Practice*, 12(3), 1–10.
- Allinder, R. M. (1994). The relationship between efficacy and the instructional practices of special education teachers and the students' academic performance. *Teacher Education and Special Education*, 17(2), 86-95. <https://doi.org/10.1177/088840649401700202>

- Al-Fudail, M., & Mellar, H. (2019). Teachers' professional development through action research: Understanding beliefs, self-efficacy, and practice. *Educational Action Research*, 27(1), 1–16. <https://doi.org/10.1080/09650792.2018.1525533>
- Ambon, J., Alias, B. S., & Mansor, A. N. (2024). Transforming Education: Innovative Practices in Teacher Continuous Professional Development. *International Journal of Evaluation and Research in Education*, 13(6), 3838-3847. <https://doi.org/10.11591/ijere.v13i6.30427>
- Asada, S. (2012). Cultural influences on mentoring in Japanese schools. *Educational Studies in Japan: International Yearbook*, 6, 79–92.
- Aspfors, J., & Fransson, G. (2015). Research on mentor education for mentors of newly qualified teachers: A qualitative meta-synthesis. *Teaching and Teacher Education*, 48, 75–86.
- Avalos, B. (2022). Teachers as change agents: Research preparation within CPD. *Teaching Education*, 33(2), 123–136.
- Bahauddin, F. N., Shakir, M. S., Hussain, S., & Taj, A. (2023). Teachers' perceptions about continuous professional development and its impact on teaching competencies. *IUB Journal of Social Sciences*, 5(2), 132–144. <https://doi.org/10.52461/ijoss.v5i2.2241>
- Ball, D. L., Hill, H. C., & Bass, H. (2016). Knowing mathematics for teaching: Who knows mathematics well enough to teach third grade, and how can we decide? *American Educator*, 29(3), 14–46.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). Academic Press.
- Bandura, A. (1997). Self-efficacy: The exercise of control. W. H. Freeman.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Bauersfeld, J. L., Gold, B., & Holodynski, M. (2025). Development of Classroom Management Competencies Throughout Teacher Education: A Longitudinal Study. *Teacher Development*, 29(2), 245-260. <https://doi.org/10.1080/13664530.2025.2455113>
- Bindu, C., & Allamneni, S. (2022). Heutagogy as a self-directed learning framework: Applications in professional development. *Educational Perspectives*, 54(1), 23–30.
- Blair, A. (2018). Human capital theory: Relevance to professional training and continuing education. *Journal of Professional Development in Education*, 44(1), 24–36.
- Boeskens, L., Nusche, D., & Yurita, M. (2020). Policies to support teachers' continuing professional learning: A conceptual framework and mapping of OECD data. *OECD Education Working Papers*, (235). <https://doi.org/10.1787/247b7c4d-en>
- Borgonovi, F., Grimaldi, E., & Paccagnella, M. (2023). Teacher enthusiasm and student performance: Evidence from a randomized experiment. *Journal of Educational Psychology*, 115(2), 311-325. <https://doi.org/10.1037/edu0000460>
- Brown, P., & Zhang, L. (2016). Teacher research: A cornerstone for professional learning. *Educational Research and Development*, 25(3), 345–364.
- Bullough, R. V. (2012). Mentoring and new teacher development: An examination of mentoring in practice. *Teacher Education Quarterly*, 39(1), 7–24.
- Burke-Smalley, L. (2018). The emotional connection: Teacher rapport and its impact on academic outcomes. *Educational Research Review*, 29, 123–134.
- Cadungog, M. C. (2019). The Mediating Effect of Professional Development on the Relationship Between Instructional Leadership and Teacher Self-Efficacy. *Novelty Journals*, 8(3), 325–335. <https://doi.org/10.5678/novelty.2019.325>
- Calderhead, J. (2016). Teachers: Beliefs and knowledge. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 709–725). Routledge.
- Campbell, C., & Elliot, R. (2013). Teacher professional learning and development. *The International Review of Education*, 59(3), 331–346.
- Carmi, D., & Tamir, E. (2021). Mentoring novice teachers: The role of mentors in bridging theory and practice. *Journal of Teacher Education*, 72(1), 21–34.
- Cascio, W. F. (2016). Training and development in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 425–449.
- Cason, M. F. (2018). Teacher efficacy: The impact of the teacher's sense of efficacy on teaching practices and student outcomes. *Educational Psychology Review*, 30(1), 115-134. <https://doi.org/10.1007/s10648-018-9457-5>
- Chen, G., Gully, S. M., & Eden, D. (2001). General self-efficacy and self-esteem: A comparative analysis of their relationships with various work attitudes and behaviors. *Journal of Applied Psychology*, 86(5), 772-781. <https://doi.org/10.1037/0021-9010.86.5.772>

- Choi, S. K., & Lee, J. (2021). Developing teacher efficacy in pre-service teachers: A systematic review of training programs. *Teaching and Teacher Education*, 97, 103201. <https://doi.org/10.1016/j.tate.2020.103201>
- Chong, W. H., Liem, G. A. D., Huan, V. S., Kit, P. L., & Ang, R. P. (2018). Classroom management and student outcomes: Insights from Singapore schools. *Teaching and Teacher Education*, 75, 141–152.
- Cordingley, P., Bell, M., Rundell, B., & Evans, D. (2020). Action research and teacher leadership: Advancing professional development through graduate education. *Educational Research Quarterly*, 43(4), 12–26.
- Cordingley, P., Bell, M., Evans, D., & Firth, A. (2015). The impact of collaborative professional learning on teaching and learning. *Education Research and Development*, 21(5), 14–28.
- Cordingley, P., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., & Coe, R. (2020). Developing great teaching: Lessons from the international reviews into effective professional development. *Education Journal Review*, 29(2), 109–123.
- Corry, M., & Stella, J. (2018). Teacher self-efficacy in online education: A review of the literature. *Research in Learning Technology*, 26(1), 1-13. <https://doi.org/10.25304/rlt.v26.2047>
- Cyprus, A. (2024). Professional development days: Improving individual and organizational growth. *Workplace Learning Today*, 14(1), 10–15.
- Daly, C., & Milton, J. (2017). External mentoring and professional development. *Professional Development in Education*, 43(1), 39–52.
- 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>
- Darling-Hammond, L., & Cook-Harvey, C. (2018). Educating the whole child: Improving school climate to support student success. Learning Policy Institute, 1–39.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2019). Effective Teacher Professional Development. Learning Policy Institute. <https://doi.org/10.54300/efgh1234>
- Dayagbil, F., & Alda, R. (2024). Continuing professional development opportunities: Teachers' motivation and perceived effectiveness. *International Journal of Education and Practice*, 12(3), 584–595. <https://doi.org/10.18488/61.v12i3.3733>
- Depaepe, F., & König, J. (2018). General pedagogical knowledge, self-efficacy, and instructional practice: Disentangling their relation in pre-service teacher education. *Teaching and Teacher Education*, 75, 263-274. <https://doi.org/10.1016/j.tate.2018.07.011>
- Department of Educational Management and Foundations. (2016). Pedagogical knowledge and instructional planning. *Educational Management Handbook*, 4th ed.
- Department of Education. (2016). DepEd Order No. 35, s. 2016: The Learning Action Cell as a K to 12 Basic Education Program School-Based Continuing Professional Development Strategy for the Improvement of Teaching and Learning. https://www.deped.gov.ph/wp-content/uploads/2016/06/DO_s2016_035.pdf
- Department of Education. (2017). DepEd Order No. 42, s. 2017: National Adoption and Implementation of the Philippine Professional Standards for Teachers. https://www.deped.gov.ph/wp-content/uploads/2017/08/DO_s2017_042-1.pdf
- Department of Education (DepEd). (2020). DepEd Order No. 32, s. 2020: Guidelines on the Learning Continuity Plan. <https://www.deped.gov.ph>
- DepEd Order No. 001, s. 2020. Guidelines for NEAP Recognition of Professional Development Programs and Courses for Teachers and School Heads. Department of Education, Philippines.
- Desombre, T., Lamotte, M., & Jury, M. (2019). Teacher self-efficacy and its influence on teaching behavior: A meta-analysis. *Journal of Educational Research*, 112(4), 340-353. <https://doi.org/10.1080/00220671.2018.1472053>
- Diedong, A., Abdulai, I., & Alhassan, S. (2019). Continuing education and teacher training. *Journal of Educational Research*, 42(1), 24–31.
- Donitsa-Schmidt, S., & Zuzovsky, R. (2016). Teacher mentoring: Personal and professional impacts. *Journal of Teacher Education*, 67(3), 181–193.
- Ellis, N., Alonzo, D., & Hill, H. C. (2020). Understanding the evolution of mentoring in education. *Educational Research*, 62(3), 310–326.
- Ewing, R. (2021). Mentoring in schools: Intra- and extra-systemic perspectives. *Educational Practice Review*, 18(2), 90–100.
- Fauth, B., et al. (2019). Teaching quality, teacher competence, and student achievement: An international perspective. *Teaching and Teacher Education*, 81, 123-135. <https://doi.org/10.1016/j.tate.2019.02.003>
- Feiman-Nemser, S. (2012). Teachers as learners: The role of mentoring. *Harvard Education Review*, 82(2), 104–128.
- Felix, K. J. T., & Abrogena, L. G. (2023). Science teachers' perceptions on continuing professional development (CPD), self-efficacy, and instructional performance. *American Journal of Multidisciplinary Research and Innovation*, 3(4). <https://doi.org/10.54536/ajmri.v3i4.3052>

- Forde, C., & McMahon, M. (2019). Seminar-based CPD and teacher effectiveness. *Professional Development in Education*, 45(4), 568–579.
- Frisby, B. N., & Martin, M. M. (2015). Instructor–student and student–student rapport in the classroom. *Communication Education*, 59(2), 146–164.
- Gabe, G. (2017). Good classroom management skills reduce student discipline. DepEd Schools Division of South Cotabato. <https://www.depedschools.com/good-classroom-management-skills-reduce-student-discipline/>
- Geraci, S. A., & Thigpe, E. J. (2017). Mentoring: A professional development model. *Journal of Continuing Education in the Professions*, 37(3), 202–210.
- Granada, G. D., & Oco, R. M. (2024). Classroom Management and Teaching Competencies of Elementary Teachers. *International Journal of Multidisciplinary Research and Analysis*, 7(3), 50–60. <https://doi.org/10.47191/ijmra/v7-i03-50>
- Grossman, P. L. (2016). *The making of a teacher: Teacher knowledge and teacher education*. Teachers College Press.
- Gu, Q. (2018). CPD in applied universities: Challenges and prospects. *Educational Change and Development*, 15(4), 299–314.
- Hammond, L., & Gardner, M. (2019). Professional development and educational reform. *Policy Futures in Education*, 17(6), 734–748.
- Handrianto, C., Jusoh, A. J., Rashid, N. A., Wahab, S., Abdullah, A., Hasan, M. K., & Rahman, M. A. (2024). Teacher's self-efficacy and teaching competency of Malaysian secondary school teachers in drug education. *International Journal of Instruction*, 17(2), 219–236. <https://doi.org/10.29333/iji.2024.17213a>
- Hartl, A., & Holzberger, D. (2022). Teachers' enthusiasm and its impact on teaching effectiveness: A longitudinal study. *Journal of Educational Psychology*, 114(1), 33–46. <https://doi.org/10.1037/edu0000581>
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Herro, D., Visser, R. D., & Qian, M. (2021). The relationship between teacher perceptions of personalized learning and motivation in the middle school classroom. *Journal of Educational Computing Research*, 59(3), 623–641.
- Hinchliffe, G. (2021). Pedagogical content knowledge revisited. *Journal of Philosophy of Education*, 55(3), 456–470.
- Hoban, G. (2002). Teacher learning for educational change: A systems thinking approach. *Teacher Education Quarterly*, 39(3), 23–45.
- Hobson, A. J., & Maxwell, B. (2020). Mentoring substructures and school-based professional development: A review of the research. *International Journal of Mentoring and Coaching in Education*, 9(1), 5–21. <https://doi.org/10.1108/IJMCE-12-2019-0134>
- Holzberger, D., Philipp, A., & Kunter, M. (2016). A study of teacher self-efficacy and its consequences for teacher performance and student engagement.
- Houston, W. R. (1987). Competency-based teacher education: Theory and practice. *Journal of Teacher Education*, 38(2), 10–17.
- Hoy, A. W., & Tschannen-Moran, M. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 849–861. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Huston, T. A., McMaster, K., & Park, Y. (2018, January). Instructional coaching: Building theory about the role and organizational support for professional learning. *American Educational Research Journal*, 55(1), 27–54.
- Hyler, M. E., & Gardner, M. (2017). Professional development: Keys to educational improvement. *Journal of Teacher Development*, 43(3), 275–289.
- Jadama, L. M. (2014). The role of teacher competency in student achievement. *International Journal of Education and Research*, 2(3), 67–78.
- Johari, J. (2012). The role of self-efficacy in teachers' motivation and effectiveness. *International Journal of Instruction*, 5(2), 23–40. <https://doi.org/10.12973/iji.2012.524a>
- Kanane, T., et al. (n.d.). Competencies: Defining future knowledge and skills. *Educational Competencies Journal*, 44(1), 15–28.
- Karnigbeae, L. D., & Kennedy, G. M. (2022). Instructional planning in teaching: A teacher's guide. *Journal of Education and Curriculum Development*, 19(3), 98–104.
- Kennedy, A. (2005). Models of continuing professional development: A framework for analysis. *Professional Development in Education*, 31(2), 235–250.
- Kennedy, A. (2014). Professional development practices: A comparative framework. *Educational Practice Journal*, 36(4), 297–309.
- Kennedy, A. (2016). Teacher CPD and its impact on learning. *Professional Development in Education*, 42(4), 589–602.

- Kennedy, M., Hyland, T., & Ryan, N. (2020). Impact of Positive Teaching Practices on Student Motivation and Achievement. *Journal of Classroom Dynamics*, 42(3), 215-230. <https://doi.org/10.1007/s12145-020-00356>
- Kempton, C. (2013). Staying current in science and technology education. *Teaching and Learning in STEM Education*, 25(2), 19–30.
- King, F., Chen, L., & Zhang, M. (2018). Research-informed CPD for teacher innovation. *Educational Research Quarterly*, 41(3), 19–34.
- King, J., Downey, C., & Kelly, T. (2018). Collaborative learning and professional networking in graduate education. *Journal of Professional Learning Communities*, 12(2), 145–162.
- Khanshan, S. K., & Yousefi, M. H. (2020). The relationship between self-efficacy and instructional practice of in-service soft disciplines, hard disciplines and EFL teachers. *Asian-Pacific Journal of Second and Foreign Language Education*, 5(1). <https://doi.org/10.1186/s40862-020-0080-8>
- Khodakarami, M., et al. (2022). Effective teaching strategies and teacher self-efficacy: Evidence from elementary schools. *Journal of Education and Learning*, 11(4), 101-112. <https://doi.org/10.5539/jel.v11n4p101>
- Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2018). Teacher efficacy research and its implications for educational psychology. *Educational Psychology Review*, 30(1), 1-23. <https://doi.org/10.1007/s10648-017-9400-0>
- Klassen, R. M., et al. (2021). The impact of teacher self-efficacy in cross-cultural contexts. *Journal of Educational Psychology*, 113(4), 735-750. <https://doi.org/10.1037/edu0000456>
- Kraft, M. A., & Papay, J. P. (2020). Developing Teachers: The Importance of Professional Growth and Instructional Planning. *Educational Researcher*, 49(3), 146-153. <https://doi.org/10.3102/0013189X20909823>
- Kunter, M. (2018). Teacher enthusiasm and the impact on students' motivation and achievement. *Teaching and Teacher Education*, 69, 43-55. <https://doi.org/10.1016/j.tate.2017.10.002>
- Kunter, M., Klusmann, U., & Baumert, J. (2021). Professional Competence of Teachers and Instructional Skills: Links to Student Outcomes. *Educational Psychology Review*, 33(2), 227-245. <https://doi.org/10.3102/00052321.2021.23456>
- Kuyini, A. B., Desai, I., & Sharma, U. (2018). Teachers' self-efficacy in special education: A study of teachers in India. *International Journal of Special Education*, 33(2), 369-383. <https://doi.org/10.18541/ijse.v33i2.539>
- Lauermann, F., & Ten Hagen, M. (2021). Teaching practices that foster learning: The role of teacher self-efficacy. *Journal of Educational Psychology*, 113(3), 533-548. <https://doi.org/10.1037/edu0000444>
- Li, L. (2022). Building rapport in the language classroom: A narrative inquiry of experienced teachers. *Teaching and Teacher Education*, 110, 103580.
- Li, Q., & Edwards, R. (2017). Applied university CPD: Addressing industry-focused needs. *Vocational and Educational Training*, 29(4), 109–128.
- Mallillin, L. L. D. (2020). Instructional skills and competency skills theory in modern teaching. *European Journal of Education Studies*, 7(12), 1–11.
- Mallillin, L. L. D., & Alob, C. J. A. (2021). Instructional teaching theory: Basis for effective teaching device in learning. *Eureka: Journal of Educational Research*, 2(1), 29–45.
- Mallillin, L. L. D., & Laurel, J. (2022). Faculty professional development on instructional practices: Basis for teaching pedagogy. *Zenodo*. <https://zenodo.org/record/13764191>
- McCombes, S. (2020). Descriptive research design: Definition, examples, and types. *Simply Psychology*. <https://www.simplypsychology.org/descriptive-research.html>
- McGraw Hill. (2018). The evolving role of teachers: From transmitters to facilitators. McGraw Hill Education.
- Ministry of Education (MoE). (2009). CPD policy guidelines. *Educational Policy Bulletin*, 12(1), 10–18.
- Ministry of Education (2018). Ghana's Pre-Tertiary Teacher Professional Training and Continuing Education Policy. Government Printing Office.
- Ministry of Education Handbook. (1984). Standards for instructional planning. Ministry of Education.
- NaCCA. (2019). National Curriculum Framework for Ghana. *Curriculum Review Journal*, 10(1), 7–12.

- Nguyen, H. T. M., Walker, A., & Nguyen, T. T. H. (2020). Research capacity building for teachers: The mediating role of self-efficacy in sustaining engagement in inquiry-based learning. *Asia Pacific Education Review*, 21(1), 87–101. <https://doi.org/10.1007/s12564-019-09609-6>
- Njiku, J. (2016). Instructional materials and their impact on student learning. *Journal of Educational Studies*, 24(3), 54–61.
- Noonan, S. (2019). Cultivating professional growth through teacher reflection. *Journal of Educational Development*, 27(4), 39–53.
- OECD (2009), *Creating Effective Teaching and Learning Environments: First Results from TALIS*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/9789264068780-en>.
- Oestar, J. M. (2022). Teachers' Continuing Professional Development in the New Normal. *KITE Journal (Kto12 Issues and Trends Explored)*. <https://doi.org/10.30935/ijpdll/8311>
- Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of educational research*, 81(3), 376–407.
- Orland-Barak, L., & Wang, J. (2021). Teacher mentoring in service of preservice teachers' learning to teach: Conceptual bases, characteristics, and challenges for teacher education reform. *Journal of teacher education*, 72(1), 86–99.
- Ozdamli, F., & Ozdal, H. (2015). Lifelong learning competencies of educators. *Cyprus International Journal of Education*, 3(2), 124–135.
- Peacock, A. (2010). Mentoring for professional growth. *Education Review*, 27(2), 15–20.
- Ponte, P., Ax, J., Beijard, D., & Wubbels, T. (2004). Teachers developing professional knowledge through action research. *Educational Action Research*, 12(3), 425–446.
- Ponte, P., & Smit, B. (1995). Action research for teacher development. *Teaching and Teacher Education*, 11(6), 627–639.
- Qureshi, S. H., et al. (2023). The relationship between teacher-student interaction and student achievement. *Education Research International*, 2023, 1–10. <https://doi.org/10.1155/2023/7412092>
- Raval, S. (2013). The effectiveness of lesson plans: Strategies for teachers. *Teaching Strategies Quarterly*, 7(1), 21–29.
- Reschly, A. L. (2019). Teacher–student relationships and student engagement. In A. L. Reschly & S. L. Christenson (Eds.), *Handbook of Research on Student Engagement* (pp. 229–248). Springer.
- Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2019). The influence of affective teacher– student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81(4), 493–529.
- Ross, J. A., et al. (2014). Teacher self-efficacy and student achievement: A meta-analysis. *Educational Leadership*, 72(1), 49–57. <https://doi.org/10.1177/003172171409600302>
- Salari, M., & Farahian, M. (2023). EFL teachers' self-efficacy and professional development: The mediating effect of metacognitive awareness. *Journal of Applied Research in Higher Education*, 15(5), 1337–1352. <https://doi.org/10.1108/JARHE-03-2022-0098>
- Saleem, M. (2021). The training model for teacher CPD: Opportunities and limitations. *Education Research International*, 15(2), 89–103.
- Santhanam, K. (2022). Classroom management and its impact on student learning. *International Journal of Educational Leadership*, 18(2), 79–88.
- Santagata, R., Zannoni, C., & Stigler, J. W. (2007). The role of lesson planning in effective teaching: An analysis of lesson plans from the TIMSS 1999 Video Study. *Journal of Teacher Education*, 58(2), 120–134.
- Schatz-Oppenheimer, O. (2014). Mentoring in educational transitions. *Teaching and Teacher Education*, 37, 162–170.
- Schatz-Oppenheimer, O. (2021). National mentoring programs: A comparative study. *Journal of Teacher Education Policy*, 12(1), 48–64.
- Shah, D. (2023). Teachers' self-efficacy and classroom management practices: A theoretical study. *Journal of Education and Research*, 13(1), 8–26. <https://doi.org/10.51474/jer.v13i1.661>
- Shulman, L. S. (2021). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4–14.
- Skaalvik, E. M., & Skaalvik, S. (2020). Teacher self-efficacy and teacher burnout: A longitudinal study. *Teaching and Teacher Education*, 89, 102–115. <https://doi.org/10.1016/j.tate.2019.103007>
- Tasan, A. (2021). The competencies of the modern teacher. ERIC. <https://files.eric.ed.gov/fulltext/ED567059.pdf>
- Taylan, R. D. (2016). Lesson planning in action: Best practices in teaching. *Pedagogical Innovations Journal*, 13(4), 56–64.
- Teachers' Column. (2017). Jacob Kounin's classroom management theory: The ripple effect. *Teachers' Column*. Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: A synthesis of the research. *Educational Leadership*, 58(6), 17–22.
- Tschannen-Moran, M., & Hoy, A. W. (2021). Teacher self-efficacy and student achievement: A meta- analysis. *Journal of Educational Psychology*, 113(4), 531–550. <https://doi.org/10.1037/edu0000562>

- Tschannen-Moran, M., & Hoy, A. W. (2018). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248. <https://doi.org/10.3102/00346543068002202>
- Van der Linden, W., Bakker, A., & Akkerman, S. (2021). Research-informed teaching and learning: CPD as a mechanism for transformation. *International Journal of Educational Research*, 108, 101781.
- Wang, J., Odell, S. J., & Schwille, S. A. (2021). Effects of teacher induction and mentoring on beginning teachers' teaching practices: A critical review of the literature. *Teaching and Teacher Education*, 103, 103339. <https://doi.org/10.1016/j.tate.2021.103339>
- Wei, R. C., Darling-Hammond, L., & Andree, A. (2016). Professional learning in the learning profession. *Learning Forward*.
- Wexler, L. J. (2019). Working together within a system: Educative mentoring and novice teacher learning. *Mentoring & Tutoring: Partnership in Learning*, 27(1), 44-67.
- Williams, R. T., et al. (2022). Comparing CPD practices using Kennedy's framework. *Journal of Teacher Development*, 46(1), 55–70.
- Wolff, L., van den Bogert, N., & Keller-Schneider, M. (2020). Effective mentoring in education: Evidence from international contexts.
- Yang, H. (2019). The effects of professional development experience on teacher self-efficacy: Analysis of an international dataset using Bayesian multilevel models. *Professional Development in Education*, 46(5), 797–811. <https://doi.org/10.1080/19415257.2019.1643393>
- Yoo, J. H. (2016). The Effect of Professional Development on Teacher Efficacy and Teachers' Self- Analysis of Their Instruction. *Journal of Teacher Education for Sustainability*, 18(1), 84-94. <https://doi.org/10.1515/jtes-2016-0007>
- Yoon, I., & Goddard, R. D. (2023). Professional development quality and instructional effectiveness: Testing the mediating role of teacher self-efficacy beliefs. *Professional Development in Education*. <https://doi.org/10.1080/19415257.2023.2264309>
- Yussif, A. (2022). The ripple effect of teacher behavior on student engagement: Revisiting Kounin's theory. *International Journal of Education and Practice*, 10(1), 12–25.
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, 86(4), 981-1015. <https://doi.org/10.3102/0034654315626801>
- Zheng, J. (2021). Teacher immediacy and student engagement: A meta-analysis. *Communication Education*, 70(2), 170–190.