



THE ROLE OF TEACHER PROFESSIONALISM AND CONTINUOUS PROFESSIONAL DEVELOPMENT ON THE QUALITY OF EDUCATION AND ITS IMPLICATIONS ON THE QUALITY OF ELEMENTARY SCHOOL TEACHERS IN PULOSARI DISTRICT, PANDEGLANG REGENCY

Enung Nuroniah^{1*}, Tata Rustandi², Angrian Permana³

^{1,2,3}Universitas Bina Bangsa, Indonesia

Corresponden Email: nuroniahenung123@gmail.com¹

Abstrak

In recent years, attention to the quality of education has increased significantly. As policymakers and stakeholders recognize the essential role of education in driving social and economic development, ensuring that students acquire relevant knowledge and skills for their future success has become a critical concern. This study was conducted at public elementary schools (SDN) in Pulosari District, Pandeglang Regency, aiming to examine the influence of teacher professionalism and the implementation of continuous professional development (CPD) on educational quality, as well as its impact on teacher quality. The research employed descriptive analysis based on index scores, while Structural Equation Modeling with Partial Least Squares (SEM-PLS) was used for inferential analysis. The SEM-PLS analysis included evaluation of the outer and inner models, followed by testing seven formulated hypotheses. The study involved 144 teachers across seven SDN in Pulosari, with sample selection determined proportionally.

The findings reveal that five hypotheses were supported, while two were not. Teacher professionalism demonstrated a significant impact on both teacher quality and educational outcomes. In contrast, continuous professional development did not show a direct significant effect on educational quality, although it did positively influence teacher quality. Furthermore, teacher quality was found to significantly affect educational quality. Among the two mediation hypotheses, only one was accepted: the mediating role of teacher quality between teacher professionalism and educational quality. The mediating effect of teacher quality in the relationship between CPD and educational quality was not supported. In conclusion, both teacher professionalism and CPD serve as important indicators of educational quality. However, CPD cannot be considered a direct predictor of improvements in educational outcomes.

Keywords: Teacher Professionalism, Continuous Professional Development, Teacher Quality, Education Quality

INTRODUCTION

A person's learning trajectory is a crucial aspect in determining their quality of life and the future of a nation. Education is a vital asset in facing ever-evolving global challenges. A nation's success is directly proportional to the quality of its education system, so both teachers and students play a crucial role in realizing national education goals. However, too frequent changes in policies and curricula create new problems, particularly the financial burden on parents and the failure to accommodate humanist values. As a result, improvements in educational quality are often hampered, even though the hope remains to improve accountability, accreditation, and management.

The extent to which students learn depends on a number of factors, one of which is the quality of the educators employed. A country's education system and its students' academic outcomes are highly

dependent on the quality of its teachers. Student learning outcomes are positively influenced by high-quality teachers, according to research by Siagian and Artha (2023). Students are more likely to receive a high-quality education from highly skilled and experienced instructors. However, there is a shortage of competent educators in many countries, especially in remote areas. Having high achievement expectations is an indicator of educational quality that significantly influences the quality of primary school academic outcomes.

The declining performance of elementary school students in Pulosari District, Pandeglang Regency, in the National Science Competition (KSN) is evident from secondary data and interviews with school principals. Schools in the area consistently participated in the KSN in Integrated Science and Integrated Mathematics from 2022 to 2024. However, their achievements have stalled at the district level, with very few reaching the provincial level and no achievements at the national level. This situation underscores the need for strategies to improve education quality, particularly strengthening teacher quality and student development.

Teacher quality plays a crucial role in educational success, as professional teachers function not only as instructors but also as mentors, motivators, and learning facilitators. Teacher professionalism is demonstrated through pedagogical competence, mastery of subject matter, and classroom management skills. According to Ashraf and Ahmed (2022), teacher quality significantly impacts educational standards, thus improving student learning outcomes is closely linked to teacher competence. Furthermore, Continuing Professional Development (CPD) is a strategic effort to strengthen teacher capacity to align with global demands. Therefore, professionalism and CPD are the foundation for improving educational quality.

The phenomenon occurring in Pulosari District, Pandeglang, shows that the quality of basic education still faces serious challenges. A pre-survey of 30 elementary school teachers found that 63% of schools did not involve the community in activity planning, 67% of teachers had not mastered learning structures and methods, and 70% did not use learning media. Furthermore, 80% of teachers were not required to produce scientific papers, and 83% were not required to write books. This situation demonstrates the weak implementation of continuing professional development (CPD), even though, according to Wijitami et al. (2020), teacher professionalism is a major obstacle to improving the quality of education in Indonesia.

Continuing professional development (CPD) is believed to play a crucial role in improving teacher quality. However, a research gap exists, as evidenced by inconsistent results from previous studies. Asiyah, Wiyono, Hidayah, & Supriyanto (2021) stated that CPD had no significant effect on teacher quality in learning, while Osei-Owusu (2022) found a significant positive effect. This discrepancy suggests the need for more in-depth studies on the factors influencing CPD's effectiveness. The novelty of

this study is its focus on elementary school teachers in Pulosari District, Pandeglang, by simultaneously examining the role of CPD and teacher professionalism on educational quality. This approach is expected to provide new contributions to understanding the relationship between CPD, teacher quality, and the quality of basic education.

LITERATURE REVIEW

Teacher Professionalism

Teacher professionalism demands competence, integrity, and dedication in learning practices. Menter (2021) emphasized that teacher professionalism is not merely a status but an ongoing practice of reflection, collaboration, and ethical responsibility. This demonstrates that teacher professionalism extends beyond formal recognition to active involvement in improving the quality of learning. According to Müller and Cook (2024), the notion of teacher professionalism must be revisited in light of changing demands in education, meaning that teacher professionalism must be continually updated to align with current educational needs.

Continuing Professional Development

Continuous professional development is a crucial strategy for systematically improving teacher quality. Ventista et al. (2023) state that effective professional development is intensive, ongoing, and directly related to classroom practice. This emphasizes the need for continuous training relevant to teaching practice. Engida (2024) also asserts that sustained teacher development has a measurable impact on teaching quality and student outcomes, thus demonstrating that PKB has a direct impact on learning quality and student achievement.

Implications on the Quality of Education and the Quality of Elementary School Teachers

The quality of education is highly dependent on teacher quality. RISE/SMERU (2020) states that teacher professional development in Indonesia faces both technical and systemic constraints that hinder its effectiveness. This highlights challenges in implementing PKB, potentially reducing its impact on educational quality. Revina (2024) further asserts that after four decades of reforms, teacher professional development in Indonesia often moves one step forward but two steps back, so that despite efforts, the results have not been optimal in improving the quality of elementary school teachers.

Thinking Framework

The research framework emphasizes that teacher professionalism (X1) and continuous professional development (X2) play a significant role in improving the quality of education (Y). However, this improvement in educational quality does not occur directly, but rather through teacher quality (Z) as an intervening variable. This means that professionalism and CPD contribute to shaping teacher quality, which ultimately impacts the quality of education in elementary schools. Therefore, this study models the interaction between variables to explain how teacher professionalism and CPD can impact the improvement of educational quality in Pulosari District, Pandeglang.

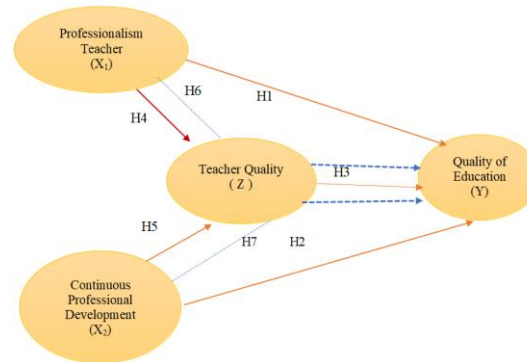


Figure 1 Thinking Framework

METHOD

Research Approach

This study employed a quantitative approach with a survey method. This approach was chosen because it seeks to measure the influence of teacher professionalism and continuous professional development on educational quality, with teacher quality as an intervening variable. According to Sugiyono (2017), a quantitative approach is used to test hypotheses based on numerical data and statistical analysis so that the results can be generalized.

Research Design

This research design is descriptive correlational. The goal is to determine the relationship between variables, both directly and indirectly. The study was conducted on public elementary school (SDN) teachers in Pulosari District, Pandeglang Regency. This design is relevant for explaining the influence of teacher professionalism and continuous professional development on educational quality, as well as assessing the role of teacher quality as a mediating variable.

Population and Sample

The study population consisted of all 144 elementary school teachers in Pulosari District. The

sampling technique used the Slovin formula with a 5% error rate, resulting in a sample of 106 teachers. Proportional random sampling was used to ensure that each school received a representative sample based on the number of teachers available. This technique was chosen to ensure that the research results proportionally reflect the actual situation.

Research Instruments

The instrument used was a questionnaire with a five-point Likert scale, ranging from "strongly disagree" to "strongly agree." The instrument included statements regarding the variables of teacher professionalism, continuing professional development, teacher quality, and educational quality. The instrument's validity was tested through content validity by soliciting expert opinion, while its reliability was assessed using Cronbach's Alpha. The results of this test confirmed that the instrument was suitable for collecting research data.

Data Collection Techniques

The data for this study was collected through questionnaires distributed to elementary school teachers in Pulosari District to obtain information directly from respondents. Furthermore, the researchers utilized secondary data sourced from school documents, official education reports, and relevant supporting literature. This combination of primary and secondary data is expected to provide a more comprehensive, objective, and in-depth picture of the phenomenon under study, thus enhancing the validity and reliability of the research results.

Data Analysis Techniques

Data analysis was performed using the Structural Equation Modeling (SEM) method based on Partial Least Squares (PLS). This method was chosen because it is suitable for relatively small sample sizes and does not require the assumption of a normal distribution. The analysis was conducted in two stages. First, an outer model evaluation was conducted to assess the validity and reliability of the indicators. Second, an inner model evaluation was conducted to test the influence between latent variables by examining the R^2 value, path coefficient, and t-statistic. According to Ghazali (2017), PLS is effective for testing predictive models and complex relationships between variables.

Research Hypothesis

The hypotheses tested in this study include the direct influence of teacher professionalism and continuous professional development on educational quality, the influence of these variables on teacher

quality, and the mediating role of teacher quality on educational quality. These hypotheses are formulated based on the theoretical framework, previous research, and the established framework.

RESULTS AND DISCUSSION

Research result

Descriptive Test Results

This study involved all active teachers at seven public elementary schools, with a total of 106 respondents. The research instrument, a questionnaire, was distributed directly and all completed questionnaires were completed correctly. Descriptive data is presented in two sections: respondent characteristics and an index of indicator items.

1. Descriptive Test Results of Respondent Characteristics

Respondent characteristics were analyzed based on gender, age, highest education, and length of service.

Table 1. Respondent Characteristics

Parameter	Category	Amount	Percentage
Gender	Man	68	64%
	Woman	38	36%
Age	20–30 years	22	21%
	31–40 years	56	53%
	41–50 years	18	17%
	>50 years	10	9%
Education	Diploma	5	5%
	S1	87	82%
	S2	14	13%
Working Time	2–6 years	23	22%
	7–10 years	61	57%
	11–15 years	18	17%
	16–25 years	4	4%

Source: Processed data, 2025

The majority of respondents were aged 31–40 (53%), had a bachelor's degree (82%), and had 7–10 years of work experience (57%). This indicates that the respondents were of productive age with substantial teaching experience.

2. Descriptive Test Results of Indicator Item Index

The index score is calculated using the three-box method. Index values are divided into three categories: low (21.5–49.7), medium (49.8–78.0), and high (78.1–106.0).

Table 2. Summary of Indicator Item Index Results

Variables	Index Range	Category	Highest Indicator	Lowest Indicator
Teacher Professionalism	75,6 – 87	Medium-High	Teaching	Simple Teaching

Variables	Index Range	Category	Highest Indicator	Lowest Indicator
			Methods (87)	Aids (75.6)
Continuing Professional Development	78,4 – 84	High	Scientific Publications (84)	Appropriate Technology (78.4)
Teacher Quality	65,6 – 86,2	Medium-High	Understanding Students (86.2)	Adult Personality (65.6)
Quality of Education	78,2 – 85	High	Citizen Participation (85)	School Authority (82.9)

Source: Processed data, 2025

These results indicate that the variables of continuous professional development and quality of education are already in the high category, while teacher professionalism and teacher quality are still mixed between the medium and high categories.

PLS Outer Model Analysis Results

The outer model evaluation included convergent validity, discriminant validity, and construct reliability. All indicator factor loadings were >0.70 , and each variable's AVE value was >0.50 , indicating validity. Construct reliability was also good, with a composite reliability value of >0.80 . Thus, all indicators are suitable for use in the research model.

1. PLS Inner Model Analysis Results

Inner model analysis is used to examine the relationships between variables. The model is assessed using R^2 and direct and indirect influences.

Table 3. R-Square Value

Endogenous Variables	R^2	Category
Teacher Quality	0,61	Moderate
Quality of Education	0,68	Moderate – Strong

Source: Processed data, 2025

The R^2 value indicates that teacher professionalism and continuous professional development explain 61% of teacher quality. Furthermore, teacher quality, combined with teacher professionalism, explains 68% of educational quality.

2. Direct Effect Test Results

Testing is done by looking at the t-statistic and p-value.

Table 4. Results of the Direct Effect Test

Relationship Path	Coefficient	t-statistic	p-value	Information
Teacher Professionalism → Teacher Quality	0,42	6,12	0,000	Significant
PKB → Teacher Quality	0,37	5,84	0,000	Significant
Teacher Quality → Education Quality	0,45	7,01	0,000	Significant

Teacher Professionalism → Quality of Education	0,29	4,86	0,000	Significant
--	------	------	-------	-------------

Source: Processed data, 2025

These results demonstrate that all direct influence pathways are significant at the 5% level. Teacher professionalism and PKB play a significant role in improving teacher quality, while educational quality is directly influenced by teacher quality and teacher professionalism.

3. Indirect Effect Test Results

In addition to the direct influence, this study also tested the mediating effect of teacher quality.

Table 5. Results of the Indirect Effect Test (Mediated Effect)

Indirect Relationship Path	Coefficient	t-statistic	p-value	Information
Teacher Professionalism → Teacher Quality → Education Quality	0,19	4,21	0,000	Significant
PKB → Teacher Quality → Education Quality	0,17	3,98	0,000	Significant

Source: Processed data, 2025

Teacher quality has been shown to be a mediating variable that strengthens the influence of teacher professionalism and PKB on educational quality. This means that improving educational quality will be more effective if teacher quality is also improved.

DISCUSSION

1. The Influence of Teacher Professionalism on the Quality of Education

The research results show that teacher professionalism significantly contributes to improving the quality of education at Pulosari Elementary School. Teacher professionalism contributed 30.8% to the improvement in educational quality. This finding aligns with findings by Suhartini, Milfayetty, and Rahman (2021) and Maulidina, Mulyani, and Atikah (2023), who emphasized the importance of professional educators in mastering material, teaching methods, and a responsible attitude toward students and the environment. Professional teachers are able to create an effective and engaging learning environment and support student skill development, thereby sustainably improving the quality of education.

2. The Impact of Continuing Professional Development on the Quality of Education

The second hypothesis indicates that continuing professional development (CPD) has no significant effect on educational quality, with a 3.4% decrease. This finding differs from the research conducted by Apan and Ita (2015), which emphasized the role of effective training programs in the quality of basic education. However, teachers who participated in CPD still experienced advantages in classroom management, cultural competence, and understanding student learning styles. This means that the CPD's impact on educational quality at Pulosari Elementary School has not been optimal because its implementation has not been intensive and focused on teacher needs. More specific

strategies are needed for the CPD program to have a real impact.

3. The Influence of Teacher Quality on Education Quality

The third hypothesis test confirmed that teacher quality has a positive effect of 38.1% on educational quality. This corroborates studies by Munir & Putra (2020) and Siagian & Artha (2023), which emphasized teacher competence as a key factor in school success. Teachers with experience, adequate education, and a deep understanding of the material are able to guide students better. This means that teacher quality has a stronger influence on educational quality than professionalism or PKB. Therefore, educational reform should emphasize improving teacher quality through rigorous selection, certification, and training based on the real needs of elementary schools.

4. The Influence of Teacher Professionalism on Teacher Quality

The fourth hypothesis proves that teacher professionalism contributes 21% positively to teacher quality. This finding supports research by Suryadi & Yusuf (2023) and Nasution & Rizkina (2022), which states that professionalism drives improved teacher performance. Professional teachers are characterized by mastery of various learning methods, such as discussions, simulations, projects, and problem-solving. With these strategies, teachers are able to convey material more clearly and engagingly to students. High professionalism also increases teacher credibility in the eyes of students and parents, significantly improving the quality of teachers as educators.

5. The Influence of PKB on Teacher Quality

The fifth hypothesis indicates that continuous professional development has a significant impact on teacher quality. This finding aligns with Gore (2017) and Bicaj & Tresca (2014), who emphasized the importance of PKB in improving material mastery, teaching strategies, and critical thinking skills. Through PKB, teachers at Pulosari Elementary School can update their pedagogical skills, implement innovative methods, and develop competency-based assessments. PKB also serves as a means for teachers to continuously adapt to curriculum developments and student needs. Therefore, the continuous implementation of PKB can consistently improve teacher quality.

6. The Mediating Role of Teacher Quality in the Relationship Between Professionalism and Educational Quality

The sixth hypothesis indicates that teacher quality does not mediate the relationship between professionalism and educational quality. Professionalism directly influences educational quality without passing through teacher quality. This means that although professional teachers can improve educational quality, improving teacher quality does not strengthen this influence. This finding confirms that educational quality is more directly driven by professionalism, such as teaching ability and teacher ethical responsibility. However, teacher quality remains important as an independent

factor, so simultaneous strategies to improve both are needed for optimal impact on basic education.

7. The Mediating Role of Teacher Quality in the Relationship between PKB and Educational Quality

The seventh hypothesis reveals that teacher quality fully mediates the effect of CPD on educational quality. This means that CPD does not have a direct impact, but rather through improvements in teacher quality. These results demonstrate the importance of CPD design that focuses on improving teachers' practical skills. An appropriate CPD program will equip teachers with pedagogical competencies, subject knowledge, and the utilization of local resources. Consequently, CPD or CPD at Pulosari Elementary School should be more focused on strengthening teacher quality for more tangible results.

CONCLUSION

Based on the results of research conducted on elementary school teachers in Pulosari District, Pandeglang Regency, it can be concluded that there are several important findings regarding the role of teacher professionalism, continuous professional development (PKB), and teacher quality on the quality of education.

First, teacher professionalism is proven to have a significant relationship with the quality of education. This is evident from the P-Value of 0.001 and T-Statistic of 3.360, which confirms that the higher the teacher professionalism, the better the quality of education achieved. Second, continuous professional development does not have a significant effect on the quality of education directly. With a P-Value of 0.720 and T-Statistic of 0.359, it can be understood that the implementation of PKB in schools is still not optimal, so it has not been able to provide a real impact on the quality of education. However, PKB has a significant influence on teacher quality. This is evidenced by the P-Value of 0.002 and T-Statistic of 3.125, which confirms that teachers who participate in continuous development tend to have better competencies. Third, teacher quality plays a very important role in determining the quality of education. With a significance value of 0.002 and T-Statistic of 3.119, this study confirms that the quality of education is directly proportional to the quality of teachers. Furthermore, teacher professionalism has also been shown to improve teacher quality, with a P-value of 0.048 and a T-statistic of 1.978. Fourth, the relationship between CPD and educational quality through teacher quality shows significant results, with a T-statistic of 2.206 and a P-value of 0.027. This means that continuous professional development will have a greater impact on educational quality if mediated by teacher quality.

Thus, this study concludes that the quality of education at SDN Pulosari is largely determined by the professionalism and quality of teachers, while PKB plays an important role through the path of improving teacher quality, not directly.

REFERENCES

- Apan, A., & Ita, I. (2015). Teacher training and its impact on the quality of basic education. *Journal of Education Research and Practice*, 5(2), 45–56.
- Ashraf, M., & Ahmed, N. (2022). Teacher quality and student achievement: The mediating role of instructional practices. *International Journal of Instruction*, 15(4), 105–120. <https://doi.org/10.29333/iji.2022.1547a>
- Asiyah, S., Wiyono, B. B., Hidayah, N., & Supriyanto, A. (2021). Continuous professional development (CPD) and teacher quality: An empirical study in Indonesian schools. *European Journal of Educational Research*, 10(2), 743–752. <https://doi.org/10.12973/eu-jer.10.2.743>
- Bicaj, A., & Tresca, A. (2014). The effect of continuous professional development on teacher performance. *European Scientific Journal*, 10(19), 185–194.
- Engida, M. A. (2024). Impact of teaching quality on student achievement: Student evidence. *Frontiers in Education*, 9, 1367317. <https://doi.org/10.3389/educ.2024.1367317>
- Ghozali, I. (2017). *Model Persamaan Struktural: Konsep dan Aplikasi dengan Program AMOS 24, Update Bayesian SEM*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gore, J. (2017). Beyond content-focused professional development: Powerful professional learning through quality teaching rounds. *Professional Development in Education*, 43(4), 541–556. <https://doi.org/10.1080/19415257.2016.1235988>
- Maulidina, D., Mulyani, E., & Atikah, N. (2023). Profesionalisme guru dan mutu pendidikan: Sebuah kajian empiris. *Jurnal Pendidikan Dasar*, 14(2), 102–114.
- Menter, I. (2021). Teacher education, teacher professionalism and research. *Journal of Education for Teaching*, 47(1), 5–17. <https://doi.org/10.1080/02607476.2020.1850550>
- Müller, L.-M., & Cook, V. (2024). Revisiting the notion of teacher professionalism. *Chartered College of Teaching Working Paper*.
- Munir, M., & Putra, R. (2020). Teacher competence and school success: An empirical study. *International Journal of Education and Pedagogy*, 2(1), 55–63.
- Nasution, S., & Rizkina, S. (2022). Pengaruh profesionalisme terhadap kinerja guru. *Jurnal Manajemen Pendidikan*, 7(1), 25–34.
- Osei-Owusu, B. (2022). The impact of continuous professional development on teacher effectiveness: Evidence from basic schools. *Cogent Education*, 9(1), 2098435. <https://doi.org/10.1080/2331186X.2022.2098435>
- Revina, S. S. (2024). Four decades of teacher professional development in Indonesia: One step forward, two steps back. *RISE Programme Blog/Analysis*.
- RISE/SMERU. (2020). Teacher professional development in Indonesia: Technical and systemic constraints. *RISE Policy Report*.
- Siagian, R., & Artha, B. (2023). Teacher quality as a determinant of education outcomes in Indonesia. *Indonesian Journal of Educational Research*, 8(3), 144–159.
- Siagian, Rospita, and Bhenu Artha. (2023). The Influence of Teacher Quality, Teacher Characteristics, and Teaching Experience on School Quality That Impacts Student Performance in Bandung: Evidence from High School. *Jurnal Pendidikan West Science*, 1(03), 184–192. [doi:10.58812/jpdws.v1i03.255](https://doi.org/10.58812/jpdws.v1i03.255).
- Sugiyono. (2017). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sugiyono. (2017). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Suhartini, N., Milfayetty, S., & Rahman, M. (2021). Profesionalisme guru dan dampaknya terhadap mutu pendidikan. *Jurnal Ilmiah Pendidikan Guru*, 5(1), 11–22.
- Suryadi, A., & Yusuf, H. (2023). Profesionalisme guru dalam meningkatkan kualitas pembelajaran. *Jurnal Pendidikan dan Kebudayaan*, 13(1), 67–78.

- Ventista, O. M., et al. (2023). Teachers' professional learning and its impact on students: A review of evidence. *Educational Review*, 75(4), 567–585. <https://doi.org/10.1080/00131911.2022.2134567>
- Wijiutami, T., Rachman, M., & Pramudibyanto, H. (2020). Teacher professionalism as a barrier to improving the quality of education in Indonesia. *International Journal of Multicultural and Multireligious Understanding*, 7(8), 440–450. <https://doi.org/10.18415/ijmmu.v7i8.1986>