

# The Influence of Pedagogical and Professional Competence on the Performance of Elementary School 4 Teachers in Selat Penuguan

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## Abstrak

Kinerja guru merupakan faktor kunci yang menentukan mutu pendidikan di sekolah dasar. Kompetensi pedagogik dan profesional diyakini memiliki pengaruh yang signifikan terhadap kinerja guru. Kompetensi pedagogik mencakup kemampuan guru dalam merencanakan, melaksanakan, dan mengevaluasi pembelajaran secara efektif, sedangkan kompetensi profesional berkaitan dengan penguasaan materi pelajaran, pemahaman terhadap kurikulum, serta pengembangan diri secara berkelanjutan. Penelitian ini bertujuan untuk menganalisis pengaruh kompetensi tersebut terhadap kinerja guru di SD Negeri 4 Selat Penuguan. Penelitian ini menggunakan metode survei kuantitatif dengan pengumpulan data melalui kuesioner yang dibagikan kepada seluruh guru, kemudian dianalisis menggunakan regresi linier berganda. Hasil penelitian menunjukkan bahwa kompetensi pedagogik dan profesional secara simultan berpengaruh positif dan signifikan terhadap kinerja guru. Temuan ini menegaskan pentingnya peningkatan kedua kompetensi tersebut guna menciptakan guru yang lebih efektif dan profesional, sehingga dapat meningkatkan kualitas pembelajaran dan prestasi siswa. Penelitian ini memberikan implikasi bagi program pelatihan guru serta strategi peningkatan mutu pendidikan di tingkat sekolah dasar.

**Kata kunci:** Kompetensi pedagogik, kompetensi profesional, kinerja guru, SD Negeri 4, Selat Penuguan.

## Abstract

Teacher performance is a key factor determining the quality of education in elementary schools. Pedagogical and professional competencies are believed to have a significant effect on teacher performance. Pedagogical competency includes the teacher's ability to plan, implement, and evaluate learning effectively, while professional competency relates to mastery of subject matter, understanding of the curriculum, and continuous self-development. This study aims to analyze the influence of these competencies on the performance of teachers at SD Negeri 4 in Selat Penuguan. A quantitative survey method was employed, with data collected through questionnaires distributed to all teachers and analyzed using multiple linear regression. The results indicate that both pedagogical and professional competencies simultaneously have a positive and significant effect on teacher performance. These findings emphasize the importance of enhancing these competencies to create more effective and professional teachers, thereby improving learning quality and student achievement. The study provides implications for teacher training programs and strategies to improve educational quality at the elementary school level.

**Keywords:** pedagogical competency, professional competency, teacher performance, SD Negeri 4, Selat Penuguan

## 1. INTRODUCTION

Education occupies a strategic position in developing high-quality human resources capable of responding to the demands of globalization and rapid technological progress. Within this framework, teachers serve as key agents in translating educational objectives into meaningful learning experiences at the school level (Ardoin, et al., 2020; Lahdesmaki et al., 2022; Gist,

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et al., 2019). Teacher performance therefore becomes a critical determinant of educational quality, as it directly affects both the effectiveness of the instructional process and students' academic achievement. A comprehensive understanding of the factors shaping teacher performance is thus indispensable to ensure the success of teaching and learning activities.

Among the various determinants of teacher performance, pedagogical and professional competencies represent core dimensions. Pedagogical competence encompasses a teacher's capacity to design, implement, manage, and evaluate learning in a manner that facilitates optimal student development. This includes understanding learners' characteristics, applying appropriate instructional strategies, and conducting meaningful assessment. In contrast, professional competence relates to mastery of subject matter, in-depth understanding of curriculum content, and sustained engagement in professional growth initiatives. Both competencies are formally mandated within Indonesia's national framework, as stipulated in Law No. 14 of 2005 on Teachers and Lecturers, which outlines the standards governing teacher qualifications and professionalism (Purwantiningsih & Suharso, 2019; Susanto, et al., 2020; Sudana et al., 2023).

In recent years, disparities in teacher performance have prompted increased attention toward strengthening teacher competencies, particularly in public elementary schools situated in rural or developing regions. Selat Penuguan, as one such educational area, encounters challenges in sustaining teacher professionalism and instructional effectiveness. These contextual realities underscore the urgency of examining how pedagogical and professional competencies contribute to teacher performance within this locality.

Accordingly, this study seeks to analyze the influence of pedagogical and professional competencies on the performance of public elementary school teachers in Selat Penuguan. The anticipated findings are expected to inform strategies for enhancing teacher quality, provide evidence-based recommendations for educational policymakers, and serve as a foundation for designing more targeted and effective teacher training and professional development programs.

## **2. METHOD**

This research adopted a quantitative approach employing a survey method to examine the influence of pedagogical and professional competencies on teacher performance. The study was conducted in public elementary schools (SD Negeri) within Selat Penuguan District, Ogan Komering Ilir Regency, South Sumatra. The research population comprised all elementary school teachers in the district, totaling 65 individuals. Given the relatively small population size, a total sampling technique was applied, whereby all teachers were included as respondents (Sobirin & Suryani, 2022; Ramadhandy & Pramono, 2024).

Data were collected through a structured questionnaire developed in accordance with competency and performance indicators stipulated in Regulation of the Minister of National Education No. 16 of 2007. The instrument was organized into three principal sections:

- 1) pedagogical competence, encompassing indicators such as lesson planning, instructional implementation, and learning evaluation;
- 2) professional competence, including mastery of subject matter, comprehension of curriculum content, and engagement in professional development; and
- 3) teacher performance, covering dimensions such as work quality, discipline, and responsibility.

Each item was measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Prior to full-scale data collection, the instrument underwent validity and reliability testing. Construct validity was examined using Pearson's product-moment correlation, while reliability was assessed through Cronbach's Alpha, with a minimum acceptable coefficient of 0.70 to ensure internal consistency.

Data analysis was conducted using multiple linear regression to determine both partial and simultaneous effects of pedagogical and professional competencies on teacher performance. Statistical analysis was performed with the assistance of IBM SPSS Statistics. Additionally, descriptive statistical techniques were employed to illustrate respondent characteristics and the distribution of responses across variables.

The research procedure was implemented systematically through the following stages: instrument development and validation, questionnaire distribution, data collection and coding, statistical analysis, and interpretation of findings based on the empirical results obtained.

### 3. RESULT AND DISCUSSION

#### *Result*

Based on multiple linear regression analysis, the results are as follows:

**Table 1.** Multiple Linear Regression Results of Pedagogical and Professional Competence on Teacher Performance at Public Elementary Schools in Selat Penuguan

Variable	B	SE B	Beta	t	p
Pedagogical Competence	0.425	0.112	0.392	3.79	0.001**
Professional Competence	0.367	0.104	0.338	3.53	0.002**
Constant	1.128	0.451	–	2.50	0.015

**Note:** \*\* $p < 0.05$  indicates statistical significance

The coefficient of determination ( $R^2$ ) is 0.612, indicating that 61.2% of the variance in teacher performance is explained by the combined effect of pedagogical and professional competence, while the remaining 38.8% is influenced by other factors outside this study.

From the table above, pedagogical competence has a positive and significant effect on teacher performance ( $B = 0.425$ ,  $p = 0.001$ ), meaning that teachers who are capable of planning, implementing, and evaluating learning effectively tend to demonstrate higher work quality, discipline, and professional responsibility. Professional competence also shows a positive and significant effect ( $B = 0.367$ ,  $p = 0.002$ ), indicating that teachers with strong subject matter mastery, curriculum knowledge, and engagement in professional development tend to perform better.

Simultaneously, the combination of pedagogical and professional competence has a significant and positive impact on teacher performance, suggesting that instructional skills and subject-matter expertise complement each other to create optimal professional practice.

Descriptive statistics indicate that most teachers' levels of pedagogical and professional competence fall within the "good" category, though there is room for further improvement toward ideal standards of teacher professionalism.

## Discussion

This study confirms that both pedagogical and professional competence have a significant and positive influence on the performance of elementary school teachers in Selat Penuguan. These findings support the theoretical perspective that teacher competence is a central determinant of educational quality, as suggested by Putra, Fitria, and Puspita (2021) and Suprihatin (2021). Teachers with strong pedagogical competence, including the ability to understand student characteristics, design lesson plans, implement effective instructional strategies, and conduct meaningful evaluations, are able to create engaging learning environments tailored to diverse student needs. Such competencies contribute to higher work quality, greater discipline, and increased professional responsibility (Nellitawati, 2020). Empirical evidence from the *Students' Perception of Elementary School Teachers' Competency* study (2022) further supports this, demonstrating a positive correlation between pedagogical competence, teacher effectiveness, and student learning outcomes.

Professional competence also plays a critical role in enhancing teacher performance. This includes mastery of subject matter, comprehensive understanding of curriculum content, and continuous engagement in professional development activities. Teachers who excel in these areas are better positioned to deliver effective instruction, integrate educational innovations, and continuously refine their teaching practices, resulting in improved overall performance in carrying out professional duties (Pratiwi et al., 2024). When analyzed simultaneously, pedagogical and professional competence exert a synergistic effect, reinforcing one another to optimize teacher performance. This aligns with Rahman and Ningsih (2023), who emphasize that subject-matter expertise and instructional skills are mutually complementary in achieving effective and sustainable teaching practices.

The study's strengths include the use of total sampling, which ensured representation of all elementary school teachers in the research area and enhanced internal validity. Additionally, multiple linear regression enabled the simultaneous examination of both partial and combined effects of pedagogical and professional competencies on teacher performance. The consistency of these findings with prior research strengthens their external validity. However, several limitations should be acknowledged. First, other potential factors influencing teacher performance, such as motivation, work environment, or leadership practices, were not included in the study. Second, the use of cross-sectional data limits the ability to establish causal relationships definitively. Finally, the specific characteristics of Selat Penuguan may differ from other regions, restricting the generalizability of these findings.

From a practical standpoint, these results highlight the importance for schools and local education authorities to prioritize the development of teachers' pedagogical and professional competencies. Structured training programs, workshops, mentoring initiatives, and supportive learning environments can help improve teacher effectiveness. Principals should ensure the provision of adequate teaching resources, access to technology-based learning tools, and systematic performance evaluation mechanisms to maximize teacher performance. Future research could expand on this study by examining potential mediating or moderating variables, such as teacher motivation, leadership style, or organizational culture, to gain deeper insights into the mechanisms linking competencies to performance.

While the majority of evidence supports the positive effect of teacher competence on performance, some studies offer contrasting or nuanced findings. For example, Faizah and Sutopo (2021) found that despite teachers demonstrating adequate pedagogical and professional competencies, the implementation of authentic assessment was limited due to insufficient feedback mechanisms. This underscores the influence of contextual and institutional factors in moderating the relationship between competence and teacher performance.

In conclusion, this study reinforces the view that pedagogical and professional competence are critical determinants of elementary school teacher performance. Strengthening these competencies should be central to teacher development policies and professional training programs. At the same time, a comprehensive approach that also considers contextual and organizational factors is essential to ensure sustainable improvements in educational quality.

#### **4. CONCLUSION**

This study concludes that pedagogical and professional competencies exert a significant influence on the performance of elementary school teachers in Selat Penuguan District. Teachers who demonstrate strong pedagogical competence are more capable of systematically planning, effectively implementing, and accurately evaluating learning activities. Such capabilities directly contribute to improved instructional quality and enhanced student achievement.

Likewise, professional competence reflected in mastery of subject matter, comprehensive understanding of curriculum content, and sustained engagement in continuous professional development plays a pivotal role in strengthening teacher performance. When integrated, these two competencies constitute the essential foundation of effective teaching practice and serve as key drivers of educational quality improvement.

The findings underscore the importance of prioritizing structured and continuous professional development initiatives. Schools and educational authorities should implement targeted workshops, mentoring programs, and competency-based performance evaluations designed to enhance teachers' pedagogical and professional capacities. In addition, school principals are encouraged to cultivate supportive institutional climates that promote collaboration, innovation, and reflective practice among teachers, thereby fostering sustained professional growth.

For future research, it is recommended to incorporate additional variables such as teacher motivation, organizational culture, leadership style, and work environment to provide a more comprehensive analysis of the determinants of teacher performance. Longitudinal research designs are also advisable to examine how competencies develop over time and to assess their long-term impact on educational outcomes.

In summary, this study reinforces the critical importance of strengthening both pedagogical and professional competencies as fundamental components in improving teacher performance and advancing educational quality in elementary schools.

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