

Teachers' Self-Efficacy in the Teaching and Learning Process at SD Negeri 149 Pekanbaru

Fitri Sihombing¹; Candra Alpiat²; Marwa Marwa³

¹ Universitas Lancang Kuning; fifitrisihombing@gmail.com

² Universitas Lancang Kuning; candraalfiat@gmail.com

³ Universitas Lancang Kuning; marwa@unilak.ac.id

Abstract: The transformation of primary education requires teachers to be more than mere content deliverers; they must become adaptive classroom managers. Teachers' self-efficacy, or their belief in their own ability, plays a critical role in determining teaching quality. This study aims to determine the level of teacher self-efficacy in the teaching and learning process at SDN 149 Pekanbaru. Using a descriptive quantitative approach, this study involved 16 teachers and employed a closed-ended questionnaire based on Bandura's indicators. The results showed that the average self-efficacy score was 126.44 out of a maximum of 150, indicating a high level. The data distribution revealed a consistent spread, with a standard deviation of 15.667 and a skewness of 0.159. The discussion linked these findings to relevant literature, highlighting that teachers' confidence was supported by experience, peer collaboration, and a positive school environment. This study concludes that high self-efficacy forms a crucial foundation for effective teaching and classroom management. It recommends experience-based training and reflective school support systems to maintain and improve teachers' self-belief. The findings contribute empirical insight for education policy development and teacher training tailored to real needs in primary schools.

Keywords: *self-efficacy; teacher; instruction; classroom management; primary school*

1. INTRODUCTION

In an era of increasingly complex educational transformation, the demand for high-quality teaching at the elementary school level continues to rise. Teachers are no longer merely expected to deliver content, but also to serve as facilitators, innovators, and effective classroom managers. A teacher's ability to manage the classroom effectively is crucial in establishing a conducive, interactive, and inclusive learning environment (Gafur, 2019). Amid the growing diversity in students' social and psychological backgrounds, instructional management competence has become a primary focus in improving the quality of basic education. In this context, teachers' self-efficacy has emerged as a critical psychological construct warranting deeper investigation.

Bandura (1997) defined self-efficacy as an individual's belief in their capacity to organize and execute the actions required to achieve specific outcomes. In the educational context, teachers' self-efficacy determines their perceived ability to manage classrooms, motivate students, and overcome instructional challenges. Research indicates that teachers with high levels of self-efficacy tend to be more optimistic, persistent, and equipped with more creative and varied strategies for classroom management (Fray & Gore, 2018). Conversely, low self-efficacy is associated with decreased teaching effectiveness and unproductive classroom interactions (Hughes, 2021).

In Indonesia, elementary school teachers play a central role in shaping students' character and academic skills. However, field observations show that many teachers struggle with classroom management, particularly in diverse settings such as Pekanbaru, Riau. Data from the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek, 2023) reveal that approximately 42% of elementary school teachers in Indonesia have never received intensive training in inclusive education and classroom management. This situation may hinder teachers' confidence in addressing student diversity, especially within inclusive and heterogeneous learning environments.

A study by Damanik, Sari, and Hutasoit (2023) highlighted that in inclusive education settings, teachers experience added pressure in managing students with diverse learning abilities. This pressure influences their self-perception and, subsequently, the quality of instruction. Similarly, Mahoney and Wills (2022) found that proper behavioral management training during the induction phase significantly enhances teachers' self-efficacy. Therefore, strengthening self-efficacy is a strategic priority in professional development for elementary school teachers.

Sehgal, Nambudiri, and Mishra (2017) emphasized that teacher self-efficacy not only affects classroom management but also contributes to overall school leadership effectiveness. Meanwhile, Shahzad and Naureen (2017) concluded that teacher self-efficacy is closely linked to student academic achievement, particularly at the elementary

and secondary levels. This suggests that the success of grassroots education heavily relies on teachers' confidence in performing their pedagogical duties. However, mapping the level of self-efficacy among elementary school teachers in public schools, particularly in Pekanbaru, remains limited.

A recent systematic review and meta-analysis by Corcoran, O'Flaherty, and Young (2024) identified several factors influencing teacher self-efficacy, including teaching experience, principal support, professional training, and classroom environment. Unfortunately, in the Indonesian context, similar studies are scarce, especially those focusing on public schools using a quantitative approach. This research gap highlights the need for further studies to accurately identify the level of self-efficacy among public elementary school teachers in local contexts, such as SD Negeri 149 Pekanbaru.

Previous studies by Nurhasanah and Hidayat (2022) revealed that teacher self-efficacy in several regions tends to be moderate to high, but significant variations were found based on workload, educational background, and work environment. This suggests that not all teachers possess stable and consistent levels of self-efficacy. Therefore, a quantitative approach is needed to measure self-efficacy objectively and to inform policymakers in designing more effective and context-sensitive teacher development programs.

Many prior studies also exhibit methodological limitations, such as small sample sizes, subjective qualitative approaches, or insufficient clarity in defining the variables used to measure self-efficacy. This study aims to fill those gaps through a systematic, quantitative approach based on empirical data. By employing valid and reliable measurement instruments, the research is expected to provide an objective overview of teachers' self-efficacy in the teaching and learning process at SD Negeri 149 Pekanbaru.

Furthermore, Saleh (2022) asserted that the implementation of the National Education System Law mandates the enhancement of teacher competencies as a cornerstone for improving instructional quality. Within this framework, teacher self-efficacy serves as a critical indicator that must be regularly evaluated. This study not only fulfills an academic need but also has broad practical implications for elementary education, especially in planning teacher training and professional development programs based on real needs in the field.

Although numerous studies have highlighted the importance of self-efficacy in education, few have examined it specifically among public elementary school teachers using a location-based approach, such as in Pekanbaru. This reveals an urgent need for focused research in specific schools to gain factual and contextual insights into teachers' self-efficacy. According to Dampson and Mensah (2023), teacher attributes such as age, teaching experience, and professional training significantly influence self-efficacy. However, local studies are still necessary to prevent generalized teacher development policies. This is the research gap that the present study intends to bridge. By exploring the local context of SD Negeri 149 Pekanbaru, the study aims to contribute new empirical evidence to Indonesia's self-efficacy research landscape. Moreover, it will support the design of training interventions grounded in real teacher needs rather than assumptions—underscoring the urgency and novelty of this research.

Wulandari and Nurjaman (2023) also noted that managing student behavior in elementary schools has become increasingly complex due to changes in student characteristics in the digital era. Without systemic support, such pressures can negatively impact teachers' self-perceptions and decrease their self-efficacy. Therefore, it is essential to first identify the current level of self-efficacy among teachers concerning the daily instructional challenges they face. Zahroh (2015) further emphasized that classroom management theories are ineffective without teachers' confidence in applying them. This implies that teaching success is not solely about technique but also about the teacher's mental readiness and self-belief. Hence, this research is highly relevant and timely, especially since SD Negeri 149 Pekanbaru has never previously been studied in this regard.

The unique learning environment at SD Negeri 149 Pekanbaru, characterized by students from diverse socio-cultural backgrounds, makes the school a representative site for research on teacher self-efficacy. Such diversity requires teachers not only to teach but also to adapt socially and psychologically to the students' varied backgrounds. This condition demands high levels of self-efficacy to ensure inclusive, adaptive, and engaging instruction. Unfortunately, there is currently no concrete data on the self-efficacy levels of teachers at this school. This study seeks to address that information gap and offer initial insights for designing targeted teacher training strategies. In this sense, the research aims not only to explain the phenomenon but also to provide evidence-based solutions.

This study adopts a quantitative approach to produce generalizable results that can inform policy-making at the school level. The approach enables researchers to measure self-efficacy numerically, analyze trends and distributions, and identify supporting or inhibiting factors. The instrument used is based on Bandura's (1997) theory, adapted to the Indonesian elementary education context. The resulting quantitative data will provide objective insights that have been largely unexplored in similar studies within Indonesia. The main strength of this approach lies in its capacity to reach broader samples with measurable validity and reliability. Accordingly, the findings are expected to be not only locally relevant but also contribute to the broader academic discourse. This study also supports the development of a more contextualized teacher self-efficacy instrument.

The primary objective of this research is to determine the level of teacher self-efficacy in the teaching and learning process at SD Negeri 149 Pekanbaru. The research question addressed is: "What is the level of teacher self-efficacy in the teaching and learning process at SD Negeri 149 Pekanbaru?" The study is expected to yield empirical findings that contribute to the development of both educational theory and practice. It can also serve as an evaluative tool for school principals and policymakers in designing more targeted professional development programs for teachers. In the long term, improving teachers' self-efficacy will positively impact instructional quality and student learning outcomes. This study also aims to strengthen teachers' roles as resilient and adaptive agents of learning, making it a strategically important endeavor in the context of national educational development.

Theoretically, this research contributes to the development of the teacher self-efficacy concept within Indonesia's elementary education context, particularly in urban areas like Pekanbaru. This is significant, as Indonesia's cultural and educational dynamics differ considerably from those of other countries. The study also aims to test the validity of existing theories in a local setting, thereby extending the applicability of educational psychology concepts. Moreover, the study's findings can inform the development of more contextual and practical self-efficacy measurement tools. In doing so, this research enriches existing literature and serves as an academic reference for future scholars. It also opens pathways for follow-up studies using both advanced quantitative and qualitative approaches, indicating the potential for continued academic contribution.

Practically, this research can serve as a foundation for school principals in designing data-driven, need-based teacher coaching strategies. Furthermore, the results can assist educational authorities in creating more contextual, efficient, and impactful training programs. For teachers themselves, the findings may offer a reflective lens into their psychological readiness to perform professional duties. Such reflection is essential for personal development and seeking appropriate support. This study may also inspire other schools to conduct similar assessments. Ultimately, the findings can be used in shaping more responsive educational policies. Therefore, the practical benefits of this study extend across multiple levels of educational stakeholders.

2. METHODS

The research instrument employed in this study is a teacher self-efficacy scale adapted from the Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk Hoy (2001), which has been proven to be both valid and reliable. This scale encompasses three core dimensions of the teaching and learning process: student engagement, instructional strategies, and classroom management—making it appropriate for measuring the level of teacher self-efficacy at SD Negeri 149 Pekanbaru. This research was conducted in June 2025 at SD Negeri 149 Pekanbaru. The selection of this location was based on considerations of data accessibility and the relevance of the school to the research focus. The population of this study consisted of all teachers at SD Negeri 149 Pekanbaru, totaling 16 individuals. The researcher employed a total sampling technique, in which all members of the population were included as the research sample, resulting in a total of 16 participants.

Data were collected using a questionnaire designed in the form of a Likert scale with five response options: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). The questionnaire was developed to assess the level of teacher self-efficacy in the teaching and learning process at SD Negeri 149 Pekanbaru. Each item in the questionnaire was constructed based on self-efficacy indicators within the educational context. The collected data were analyzed using descriptive statistical techniques, including mean, standard deviation, and percentage. This analysis aimed to provide a general overview of the level of teacher self-efficacy in the teaching and learning process at SD Negeri 149 Pekanbaru. The findings are expected to yield clear and measurable conclusions about the phenomenon under investigation.

3. FINDINGS AND DISCUSSION

Research Findings: Teachers' Self-Efficacy in the Teaching and Learning Process at SD Negeri 149 Pekanbaru

3. 1. Data Description

This study involved 16 teachers from SD Negeri 149 Pekanbaru as respondents. Data were collected using a self-efficacy questionnaire consisting of items that reflect teachers' confidence in planning, implementing, and evaluating the teaching and learning process.

Descriptive statistical analysis revealed the following results:

Descriptive Measure	Value
Minimum Score	102
Maximum Score	150
Score Range	48
Total Cumulative Score	2,023
Mean (Average Score)	126.44
Standard Error of Mean	3.917
Standard Deviation	15.667
Skewness	0.159
Kurtosis	-1.046

The descriptive statistics presented in Table 1 show that the minimum self-efficacy score obtained by teachers was 102, while the maximum score reached 150, resulting in a score range of 48. The total cumulative score from all 16 respondents amounted to 2,023. The mean score was 126.44, indicating a generally high level of self-efficacy among the teachers. The standard error of the mean was 3.917, suggesting the sample mean is a reliable estimate of the population mean. A standard deviation of 15.667 indicates a moderate variation in self-efficacy scores across the participants. Furthermore, the skewness value of 0.159 shows that the data distribution is approximately symmetrical, meaning the scores are evenly spread on both sides of the mean. The kurtosis value of -1.046 reflects a platykurtic distribution, which is flatter than the normal curve, indicating fewer extreme values or outliers. Overall, the data suggest that the self-efficacy levels of the teachers are consistently high and evenly distributed.

3. 2 Data Interpretation

Based on the mean score of 126.44, the level of teacher self-efficacy can be categorized as high. This indicates that, overall, the teachers at SD Negeri 149 Pekanbaru possess strong confidence in carrying out the teaching and learning process—including classroom management, the application of appropriate instructional methods, adaptation to students' needs, and evaluation of learning outcomes. The maximum score of 150 and the minimum of 102 suggest some variation in self-efficacy levels among individuals. However, the standard deviation of 15.667 indicates that such variation is not extreme, showing that the majority of teachers' scores are clustered around the mean. A skewness value of 0.159 implies that the data distribution is symmetrical, indicating a balanced spread of scores between lower and higher ranges. This suggests that there are no dominant groups of teachers with either

very low or very high self-efficacy levels. In other words, teacher self-efficacy is fairly evenly distributed among the respondents.

The kurtosis value of -1.046 indicates a platykurtic distribution—flatter than the normal distribution. This suggests that the data contain few extreme values (outliers), supporting the conclusion that most teachers have consistent and stable levels of self-efficacy. Based on the descriptive analysis, the level of teacher self-efficacy in the teaching and learning process at SD Negeri 149 Pekanbaru is categorized as high and evenly distributed. This reflects that teachers at this school generally possess strong confidence in their professional abilities to manage the instructional process. The symmetric and non-extreme distribution further reinforces the finding that most teachers fall within a consistently high self-efficacy range.

4. DISCUSSION

The findings of this study indicate that the self-efficacy levels of teachers at SD Negeri 149 Pekanbaru fall into the high category. This supports previous research by Shahzad and Naureen (2017), who found that teacher self-efficacy positively correlates with teaching effectiveness and student academic achievement. Similar to the teachers in Pekanbaru, the participants in this study demonstrate strong self-confidence in facing instructional challenges, reaffirming the critical role of self-efficacy in creating a productive learning environment that supports student development. Moreover, the results align with the findings of Fray and Gore (2018), who argued that teachers with high self-efficacy are more capable of implementing adaptive classroom management strategies. The teachers at SD Negeri 149 Pekanbaru were observed to effectively address student behavior using appropriate pedagogical approaches, such as positive reinforcement and the establishment of a conducive learning environment. This suggests that high self-efficacy directly enhances teachers' abilities to manage classrooms professionally and responsively. However, these findings contrast with those of Hughes (2021), who reported that poor quality classroom management training contributes to lower levels of teacher self-efficacy. In the case of SD Negeri 149 Pekanbaru, despite not all teachers having received intensive training, they still exhibited high self-efficacy levels. This suggests that other factors—such as teaching experience, peer support, or school leadership—may informally shape and strengthen teachers' self-efficacy.

These results are also consistent with Mahoney and Wills (2022), who emphasized the importance of experiential and reflective-based training in enhancing teacher self-efficacy. Although formal training remains limited among elementary school teachers in Indonesia (Kemendikbudristek, 2023), the teachers at SD Negeri 149 appear to have developed self-efficacy through direct field experience. This supports the notion that training is not the sole pathway for improving self-efficacy; practical success in overcoming classroom challenges also plays a crucial role in shaping teachers' self-perceptions of competence. On the other hand, these findings are not entirely consistent with national data from Kemendikbudristek (2023), which reported that 42% of elementary school teachers had never participated in classroom management training and were thus at risk of low self-efficacy. Contrary to these national trends, teachers at SD Negeri 149 Pekanbaru still demonstrated high levels of self-efficacy. This underscores the importance of considering local context and individual teacher characteristics when assessing self-efficacy, rather than relying solely on formal training indicators.

Further differences emerge when compared to the study by Nurhasanah and Hidayat (2022), which found that elementary teachers in some regions generally exhibited moderate self-efficacy, with variations based on educational background and workload. In contrast, the teachers at SD Negeri 149 Pekanbaru displayed high and relatively uniform scores. This could be attributed to a positive work culture, a supportive school climate, and instructional practices tailored to the unique characteristics of their students. Ultimately, the findings of this study reinforce the view that teacher self-efficacy is a dynamic construct influenced by personal, organizational, and environmental factors. As Corcoran, O'Flaherty, and Young (2024) observed, self-efficacy is shaped by multiple variables, including teaching experience, principal support, and classroom conditions. In the context of SD Negeri 149 Pekanbaru, it is likely that a combination of these factors contributed to the teachers' positive perceptions of their abilities. This study provides valuable empirical evidence from a local setting, enriching the academic discourse on teacher self-efficacy in Indonesia.

5. CONCLUSION

T Based on the research findings, it can be concluded that the level of teacher self-efficacy at SD Negeri 149 Pekanbaru is categorized as high. This is reflected in the average score of 126.44 and the stable distribution of data. The teachers demonstrated strong confidence in addressing instructional challenges, particularly in managing student behavior within inclusive and heterogeneous classrooms. These findings reinforce the notion that self-efficacy is a key factor in enabling teachers to conduct effective, adaptive, and responsive teaching and learning processes.

This conclusion also affirms previous studies that emphasize the critical role of self-efficacy in shaping teachers' pedagogical and managerial competencies. However, this study offers a novel contribution by highlighting the local context of public elementary schools—a setting that has been relatively underexplored in the existing academic literature. Therefore, strengthening teacher self-efficacy should be prioritized in professional development initiatives at the elementary education level.

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