

The Influence of Academic Supervision and Teacher Professionalism on the Quality of Learning

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Abstract

This study examines the influence of academic supervision and teacher professionalism on the quality of learning at public elementary schools in Warungpring District, Pemalang Regency. A quantitative correlational approach was used involving 117 teachers selected proportionally. Data were collected through Likert-scale questionnaires measuring teachers' perceptions of academic supervision, teacher professionalism, and learning quality. Data analysis employed simple and multiple linear regression to test the partial and simultaneous effects of the independent variables on the dependent variable. The results showed that academic supervision had a regression coefficient of 0.602, indicating that every one-unit increase in structured supervision would improve learning quality by 0.602 units. Teacher professionalism also had a regression coefficient of 0.650, meaning that a one-unit increase in ongoing professional development would raise learning quality by 0.650 units. Simultaneously, these two variables contributed 72.6% to the variation in learning quality at the elementary schools. These findings emphasize the importance of structured supervision and ongoing professional development as key strategies for improving learning quality. The study recommends that school principals and education policymakers focus on enhancing these two aspects through continuous training, mentoring, and evaluation programs to support effective learning processes. Further research is also suggested to include other potential variables influencing learning quality to obtain more comprehensive results.

Keywords: Academic Supervision; Teacher Professionalism; Learning Quality

Introduction

Education is a fundamental aspect in shaping a qualified and competitive future generation of the nation. Every Indonesian citizen has the right to receive proper education as mandated in Article 31, paragraph (1) of the 1945 Constitution, which affirms education as a basic right that must be guaranteed by the state without exception. Furthermore, paragraph (3) stipulates the government's responsibility to design and implement a national education system that not only focuses on academic aspects but also on character development through faith, piety, and noble morals. According to Law Number 20 of 2003 concerning the National Education System, the function of national education is to develop the abilities and shape the character and civilization of a dignified nation to educate the nation's life. Quality education is expected to develop students' potential to become faithful, pious, virtuous, healthy, knowledgeable, skilled, creative, independent individuals, as well as democratic and responsible citizens.

Learning quality is one of the main indicators of educational success in schools. Quality learning enables students to develop holistically, encompassing spiritual, intellectual, skills, and social attitudes (Wicaksono & Sutikno, 2019; Nani Fitriyana et al., 2024). Operationally, learning quality refers to an effective teaching and learning process so that learning objectives can be optimally achieved (Mariani in Haryati & Rochman, 2012; Sudjana, 2017). This quality can be observed from various dimensions, including teacher behavior in designing and implementing learning, active student involvement, a

conducive learning climate, learning materials and media, and an appropriate assessment system (Prasetyo, 2013; Hanafiah & Suhana, 2023; Suryani et al., 2024)¹. According to Mariani in Haryati & Rochman (2012), learning quality can be understood as the intensity of systemic and synergistic relationships between teachers, students, the learning climate, and learning media in producing optimal learning processes and outcomes aligned with curricular demands. Prasetyo (2013) adds that learning quality is the level of achievement of learning objectives, encompassing knowledge acquisition, skills, and attitude development through classroom learning processes. Sudjana (2017) asserts that learning quality refers to the effectiveness of teaching and learning activities in achieving predetermined goals. Therefore, learning quality involves not only learning outcomes but also the learning processes and conducive conditions.

Although learning quality is a shared goal, the results of the Education Quality Report (*Rapor Mutu*) in public elementary schools across Warungpring Subdistrict, Pemalang Regency indicate that learning quality achievements remain in the moderate category, particularly in the aspects of classroom management, psychological support, and learning strategies. This signifies the need for significant improvement in learning quality within this region.

Tabel 1. Summary of Learning Quality Achievement in the Education Report Of Public Elementary Schools in Warungpring Subdistrict, 2024

No.	Assesment Aspect	Regency Score		Warungpring District Score					
		Score	Category	Poor	Moderate	Goog			
1.	D.1.1 Classroom Management	63,09	Sedang	4	18%	11	50%	7	32%
2.	D.1.2 Psychological Support	68,48	Sedang	5	23%	10	45%	7	32%
3.	D.1.3 Learning Strategies	60,2	Sedang	6	27%	10	45%	6	27%

Sumber: Education Report 2024

From table 1, it is evident that the learning quality in public elementary schools in Warungpring Subdistrict remains in the moderate category. In the aspect of Classroom Management, the regency score is 63.09, with 18% of schools in Warungpring categorized as poor, 50% moderate, and 32% good. The Psychological Support aspect has a regency score of 68.48, with 23% of schools rated poor, 45% moderate, and 32% good. For Learning Strategies, the regency score is 60.2, with 27% of schools rated poor, 45% moderate, and 27% good. These data indicate that the majority of schools fall within the moderate category, although improvements are needed in classroom management, psychological support, and learning strategies within the region.

One of the main factors influencing learning quality is the academic supervision conducted by school principals. Principals play a strategic role as supervisors who assist teachers in enhancing professionalism and learning quality through systematic and continuous academic supervision activities (Sagala, 2012; Mulyasa, 2018; Karwati, 2019). Academic supervision is a guidance process aimed at enhancing teachers' ability to manage learning to effectively achieve educational goals. Glickman in Dirjen PMPTK Diknas (2008) defines academic supervision as a series of activities that assist teachers in developing their ability to manage learning processes. Priansa (2014) and Suharismi in Mulyadi (2018) affirm academic supervision's function as professionalization efforts and quality improvement through observation and feedback. Steps of academic supervision include planning, implementation, supervision result analysis, feedback provision, and follow-up (Snae in Karwati, 2019). Danim and Khairil (2015) explain that principals' supervisory competencies encompass goal formulation, program development,

implementation, mentoring, teaching new insights, and reporting supervision results. Effective academic supervision significantly impacts teacher professionalism and learning quality (Suwartini, 2017; Hapizoh et al., 2020)¹. However, initial observations reveal that the implementation of academic supervision in public elementary schools in Warungpring Subdistrict is not yet optimal, characterized by low frequency of classroom observations, feedback provision, and follow-up on learning improvements.

Teacher professionalism is also a key factor affecting learning quality. A professional teacher is an educator who masters pedagogical, personal, social, and professional competencies comprehensively, is capable of managing learner-centered instruction, and demonstrates a strong commitment to improving education quality (Law No. 14/2005; Satriardi, 2016; Yunus, 2016). Dalyono (2020) defines teacher professionalism as the specific ability and expertise possessed by teachers to optimally perform teaching tasks. Professional teachers master pedagogical, personality, social, and professional competencies according to national education standards. Characteristics of professional teachers include mastery of material, teaching methods, good behavior, and high discipline (Imam, 2023; Surya Siti Roskina, 2019). Dimensions of teacher professionalism consist of attitude and commitment, broad and deep mastery of material, learner-centered learning management, as well as effective collaboration and interaction (Kemdikbud, 2005; Ghufroin in Yunus, 2016). Teacher professionalism contributes significantly to education quality and the improvement of learning through innovation, reflection, and continuous development (Snoek in Pamungkas, 2014; Hapizoh et al., 2020)¹. Although some teachers in Warungpring have obtained professional certification, the implementation of these competencies in practice remains suboptimal, particularly in aspects of managing a safe learning environment, utilizing effective teaching methods, and conducting learner-oriented assessments.

This study aims to examine the simultaneous influence of academic supervision and teacher professionalism on learning quality in public elementary schools in Warungpring Subdistrict, Pematang Regency. By addressing the research gap connecting these two variables within the primary education context, this study is expected to contribute both theoretically and practically to improving education quality through enhanced supervision and teacher professionalism. This research holds significant novelty by integrating the two main variables—academic supervision and teacher professionalism—simultaneously in the context of improving learning quality at the elementary school level. Unlike previous studies which tend to focus on a single variable separately, this study tests the combined contribution of both factors within a comprehensive analytical model. Furthermore, this study is conducted in Warungpring Subdistrict, Pematang Regency, a region that has not been extensively studied in terms of education management and learning quality. Therefore, the results are expected to provide contextual and empirical insights relevant for local policy-making. Moreover, this study highlights the suboptimal implementation of academic supervision and the ongoing challenges teachers face in adapting to modern educational paradigm shifts. Employing an empirical and systematic approach, this study aims to identify real inhibiting and supporting factors and provide practical, applicable recommendations for improving learning quality in elementary schools. Thus, this study not only enriches the knowledge base in education management but also offers concrete contributions to enhancing the quality of primary education in Indonesia.

Method

This study employs a quantitative approach aimed at testing the proposed hypotheses. This approach involves collecting numerical data through standardized

research instruments and analyzing them statistically to obtain objective results that can be generalized to a broader population. The type of research used is correlational research, intended to examine the influence of academic supervision and teacher professionalism on the quality of learning in public elementary schools in Warungpring Subdistrict, Pemalang Regency. The study was conducted over 12 months, from August 2024 to July 2025, in 22 public elementary schools within the region. A correlational design was used to test the relationship between the independent variables, namely academic supervision (X1) and teacher professionalism (X2), and the dependent variable, which is learning quality (Y).

The variable of learning quality is defined as the effectiveness of the learning process, including innovative planning, implementation, and evaluation of learning involving self-reflection by both teachers and students. Academic supervision is a guidance process aimed at improving learning quality through supervision planning, classroom observation, feedback provision, collaboration, and follow-up on teachers' professional development. Meanwhile, teacher professionalism encompasses attitude and commitment, mastery of learning materials, learner-centered learning management, as well as effective collaboration and interaction.

The population in this study comprises all public elementary school teachers in Warungpring Subdistrict totaling 166 individuals. The sample was drawn using proportional random sampling with Slovin's formula at a 5% precision level and 95% confidence level, resulting in a sample of 117 teachers. The sample proportion was adjusted according to the number of teachers in each school. The instrument used was a Likert scale questionnaire with five response options to measure respondents' attitudes and perceptions toward the research variables. The questionnaire was developed based on established variable indicators to comprehensively measure all aspects of the variables.

Data collection was carried out by distributing closed questionnaires to respondents. Instrument validity was tested using Pearson product-moment correlation with SPSS version 21.0, and instruments were declared valid if the calculated r -value was greater than or equal to the table r -value at a 5% significance level. Reliability testing employed Cronbach's Alpha to measure instrument consistency, with a minimum value of 0.600. Prior to regression analysis, classical assumption tests were conducted, including normality test using Kolmogorov-Smirnov with the criterion of normal distribution if significance value > 0.05 (Sugiyono, 2018); multicollinearity test using Variance Inflation Factor (VIF) and Tolerance (TOL) where $VIF < 10$ and $TOL > 0.1$ indicate no multicollinearity (Sahir, 2021); heteroscedasticity test to ensure constant residual variance with significance value > 0.05 (Santoso, 2012); and linearity test to confirm linear relationships between independent and dependent variables with the criterion F calculated ≥ 0.05 (Siregar, 2014).

Data analysis consisted of two stages: descriptive analysis to provide an overview of the data using statistics such as mean and percentage, and inferential analysis employing simple linear regression, multiple regression, t -test, and F -test with the assistance of SPSS version 25. The multiple regression model used is formulated as $\hat{Y} = a + b_1X_1 + b_2X_2 + e$, where \hat{Y} represents learning quality, a is the constant, b_1 and b_2 are regression coefficients for academic supervision and teacher professionalism respectively, and e is the error term. Simple and multiple correlation coefficient analyses were conducted to measure the strength and direction of relationships among variables, with interpretations ranging from very low to very strong. The coefficient of determination (R^2) was used to measure the proportion of the dependent variable variance explained by the independent variables, with values ranging from 0 to 1.

Respondents' perceptions of academic supervision, teacher professionalism, and learning quality were measured using Likert-scale questionnaires from 1 to 5. Descriptive analysis revealed the following average scores and interpretations: (1) Academic Supervision (X1) with a mean score of 3.85 categorized as good, indicating that teachers perceive the implementation of academic supervision in their schools as fairly effective, although there is room for improvement; (2) Teacher Professionalism (X2) with a mean score of 3.90 categorized as good, showing that most teachers have a positive perception of their professionalism in performing learning tasks; (3) Learning Quality (Y) with a mean score of 3.78 categorized as good, indicating that learning quality in public elementary schools in the study area is satisfactory despite areas that require enhancement.

Result dan Discussion

The results of the simple linear regression analysis indicate that the variable academic supervision has a strong and significant influence on learning quality. The regression coefficient for academic supervision is 0.602, which means that every one-unit increase in academic supervision will improve learning quality by 0.602 units. The coefficient of determination (R^2) for academic supervision is 0.420, indicating that 42.0% of the variation in learning quality can be explained by academic supervision alone. Teacher professionalism is proven to have the strongest and most significant influence on learning quality, with a regression coefficient of 0.650. This shows that every one-unit increase in teacher professionalism will enhance learning quality by 0.650 units. The coefficient of determination for teacher professionalism is 0.650, meaning that this variable can explain 65.0% of the variation in learning quality partially. Furthermore, the results of multiple regression analysis demonstrate that academic supervision and teacher professionalism simultaneously exert a significant and strong influence on learning quality. The F-test yields an F calculated value of 52.174 with a significance of $p = 0.000$ ($p < 0.05$), indicating that the two independent variables jointly affect learning quality significantly. The coefficient of determination (R^2) for the multiple regression model is 0.726, meaning that 72.6% of the variation in learning quality can be explained by the combined variables of academic supervision and teacher professionalism, while the remaining 27.4% is influenced by other factors not included in this study's model.

These findings reveal that both academic supervision and teacher professionalism, whether partially or simultaneously, play a crucial role and have a strong influence on improving learning quality in public elementary schools in Warungpring Subdistrict, Pemalang Regency. Academic supervision functions as an important mechanism to help teachers improve their competencies and teaching methods. This is reinforced by the findings of Hermawan and Santoso (2021), who found that academic supervision significantly enhances teaching effectiveness and teacher professionalism. Moreover, Putra et al. (2020) explained that the systematic and continuous implementation of academic supervision plays a vital role in improving learning quality in elementary schools. Effective academic supervision can accurately identify teachers' needs, provide constructive feedback, and encourage continuous professional development. Dewi and Wibowo (2020) asserted that supervision focusing on teacher professional development positively contributes to the improvement of the learning process and outcomes. Kartini and Anwar (2017) also stated that intensive and collaborative supervision implementation contributes to positive changes in teachers' teaching practices. Additionally, Lubis and Hasanah (2021) showed that supervision oriented toward professional development motivates teachers to improve learning quality.

Teacher professionalism emerges as the most dominant variable influencing learning quality, supported by the findings of Fauziah and Widodo (2018), who stated that teachers with high professionalism are able to apply various innovative teaching strategies, thereby significantly improving student learning outcomes. The study by Rahmawati and Kusuma (2020) also emphasizes that pedagogical competence and teacher commitment are key factors in determining learning quality in elementary schools. Teacher professionalism encompasses pedagogical skills, mastery of content, professional attitudes, and the ability to innovate in teaching. According to Hidayat and Prasetyo (2020), teachers who demonstrate high professionalism can apply various teaching methods tailored to students' needs, thereby significantly improving learning outcomes. This is supported by Yuliani and Sari (2021), who underscore the importance of enhancing teacher competence as a key to successful teaching and learning processes. Regarding teacher professionalism, various studies confirm that ongoing competence enhancement through training and development is a principal factor in successful learning (Fauziah and Widjaja, 2018; Sari and Putra, 2021). Professional teachers not only master the learning materials well but also create a pleasant and effective learning atmosphere (Halimah and Yusuf, 2020).

While the results strongly support the positive influence of academic supervision and teacher professionalism, it is important to critically consider the local context of Warungpring Subdistrict. The relatively high R^2 value (0.726) suggests that these two variables are major contributors to learning quality, but there remain other influencing factors. For example, the availability and quality of school infrastructure (Pratiwi & Nurhadi, 2022), student motivation (Sari & Wulandari, 2021), parental involvement (Susanti et al., 2023), and the use of technology in learning (Setiawan et al., 2022) have been shown in other studies to affect learning outcomes. In this study, the remaining 27.4% of unexplained variance may be attributed to such factors. Pratiwi and Nurhadi (2022) found that adequate school facilities significantly support the effectiveness of teaching and learning. Sari and Wulandari (2021) reported that student motivation mediates the relationship between teacher competence and learning achievement. Susanti et al. (2023) highlighted the role of parental involvement in supporting student learning, especially in elementary education. Furthermore, the integration of digital learning tools, as discussed by Setiawan et al. (2022), can enhance student engagement and learning outcomes when combined with effective teaching practices.

Overall, the results of this study emphasize the importance of strengthening both academic supervision and teacher professionalism in efforts to improve learning quality. This aligns with education management theory, which states that improving education quality requires simultaneous attention to supervision and human resources (Puspitasari and Rahman, 2022). Therefore, school principals and educational policymakers must ensure that academic supervision is conducted systematically and that teacher professionalism is enhanced through continuous training and development programs. At the same time, attention should also be given to other supporting factors such as student motivation, learning facilities, parental involvement, and technology integration to achieve comprehensive improvement in learning quality. Future research is recommended to include these variables to obtain a more holistic understanding of the determinants of learning quality in public elementary schools.

Conclusion

Based on the results of the analysis and discussion conducted, it can be concluded that academic supervision has a strong and significant influence on learning quality, contributing 42.0%. This indicates that improvements in academic supervision directly

enhance the effectiveness of the learning process in public elementary schools in Warungpring Subdistrict, Pemalang Regency. Teacher professionalism is the dominant factor affecting learning quality, with a contribution of 45.0%, indicating that professional teachers are capable of implementing effective and innovative teaching strategies, thereby positively impacting student learning outcomes. Simultaneously, these two variables—academic supervision and teacher professionalism jointly contribute 67.8% to learning quality. This affirms that improving educational quality requires synergy between these two aspects simultaneously. Based on these findings, several recommendations are proposed. First, school principals and education managers should enhance the implementation of academic supervision systematically and continuously, focusing on providing constructive feedback and professional mentoring to teachers to improve learning effectiveness. Second, teachers are advised to continuously improve their professionalism through consistent development of pedagogical competence and innovation in teaching methods. Third, local governments and education offices should provide comprehensive training and mentoring programs to support the enhancement of principals' supervisory capabilities and teacher professionalism. Finally, future researchers are encouraged to conduct studies incorporating other variables potentially influencing learning quality, such as facilities and infrastructure and student motivation, to obtain a more comprehensive understanding of factors improving education quality. This study has several limitations that should be considered. First, the research was conducted only among teachers in public elementary schools in Warungpring Subdistrict, Pemalang Regency, so the results may have limited generalizability to other regions with different characteristics. Second, the variables studied were limited to academic supervision and teacher professionalism, while other potentially influential factors such as facilities and infrastructure, student motivation, and parental support were not included in the analytical model. Third, the use of subjective instruments such as questionnaires may affect the accuracy of respondents' perceptions of the research variables. Fourth, this study employed a quantitative approach without qualitative depth that could provide more profound insights into factors influencing learning quality

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