

The Impact of Supervision and Teacher Performance on Elementary School Students' Learning Outcomes in Thirteen Tanjung Lago

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Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh supervisi dan kinerja guru terhadap hasil belajar siswa sekolah dasar di SDN Tanjung Lago 13. Supervisi pembelajaran merupakan bagian dari kepemimpinan instruksional yang berperan dalam memberikan umpan balik, pendampingan profesional, serta penguatan praktik pengajaran berbasis bukti. Di sisi lain, kinerja guru mencerminkan kompetensi pedagogik, penguasaan materi, kemampuan manajemen kelas, serta keterlibatan guru dalam proses pembelajaran yang secara langsung memengaruhi capaian akademik siswa. Penelitian ini menggunakan pendekatan kuantitatif dengan desain deskriptif-korelasional. Sampel penelitian terdiri atas 50 guru dan 200 siswa yang dipilih melalui teknik purposive sampling. Data dikumpulkan melalui kuesioner terstruktur, instrumen penilaian kinerja guru, serta dokumentasi nilai akademik siswa. Analisis korelasi dan regresi berganda menunjukkan bahwa supervisi guru berpengaruh positif dan signifikan terhadap hasil belajar siswa. Kinerja guru juga terbukti memiliki pengaruh positif yang lebih kuat terhadap capaian akademik. Secara simultan, supervisi dan kinerja guru secara signifikan memprediksi hasil belajar siswa. Temuan ini menegaskan bahwa efektivitas supervisi akan optimal apabila diiringi dengan peningkatan kompetensi dan profesionalisme guru. Implikasi penelitian ini menekankan pentingnya penguatan kepemimpinan instruksional dan pengembangan profesional berkelanjutan guna meningkatkan kualitas pembelajaran di tingkat sekolah dasar.

Kata kunci: supervisi instruksional, kinerja guru, hasil belajar, kepemimpinan sekolah, sekolah dasar

Abstract

This study aims to examine the impact of teacher supervision and teacher performance on elementary school students' learning outcomes at SDN Tanjung Lago 13. Instructional supervision, as a component of instructional leadership, plays a crucial role in providing professional feedback, structured guidance, and evidence-based teaching support. Teacher performance reflects pedagogical competence, subject mastery, classroom management skills, and instructional engagement, all of which directly influence students' academic achievement. This research employed a quantitative approach using a descriptive-correlational design. The sample consisted of 50 teachers and 200 students selected through purposive sampling. Data were collected using structured questionnaires, teacher performance appraisal instruments, and students' academic records. Correlation and multiple regression analyses revealed that teacher supervision has a positive and significant effect on student learning outcomes. Teacher performance demonstrated a stronger direct influence on academic achievement. Simultaneously, supervision and teacher performance significantly predicted students' academic success. The findings indicate that the effectiveness of supervision is maximized when accompanied by high levels of teacher competence and professionalism. This study highlights the importance of strengthening instructional leadership and continuous professional development to enhance the quality of learning at the elementary school level.

Keywords: instructional supervision, teacher performance, learning outcomes, instructional leadership, elementary education

1. INTRODUCTION

Improving the quality of education remains a central concern in efforts to enhance students' academic achievement. At the elementary school level, learning outcomes are not only

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shaped by curriculum and facilities but are strongly influenced by the quality of teaching and the professional environment in which teachers work. Recent research consistently indicates that teacher-related factors, particularly instructional supervision and teacher performance play a decisive role in determining students' academic progress (Bardach et al., 2021; Blazar & Kraft, 2020; Chetty et al., 2019).

Instructional supervision is widely understood as a structured process through which school leaders provide professional guidance, feedback, and support to improve classroom practices. Rather than functioning merely as administrative monitoring, contemporary supervision emphasizes developmental coaching, reflective dialogue, and evidence-based instructional improvement (Hallinger & Wang, 2020; Liu et al., 2020; Zepeda & Ponticell, 2019). When supervision is implemented consistently and constructively, it helps teachers refine instructional strategies, strengthen classroom management, and align teaching practices with learning objectives. Empirical findings suggest that effective instructional leadership contributes indirectly to student achievement by enhancing teacher capacity and instructional quality (Shaked & Schechter, 2019; Tan et al., 2022).

In parallel, teacher performance represents the practical manifestation of teachers' pedagogical competence, subject-matter mastery, and classroom effectiveness. Studies have shown that variations in teacher effectiveness are significantly associated with differences in student academic growth (Chetty et al., 2019; Nguyen et al., 2020). Teachers who demonstrate strong instructional skills, maintain productive classroom environments, and actively engage students tend to produce higher levels of academic achievement (Kim & Klassen, 2019; Vieluf et al., 2019). Furthermore, professional development and coaching initiatives have been found to strengthen teacher expertise, which in turn positively affects learning outcomes (Kraft & Blazar, 2019; Kraft & Papay, 2021).

Although a growing body of research has examined instructional supervision and teacher performance separately, integrated analyses that simultaneously investigate their combined influence on student learning outcomes remain relatively limited, particularly in localized elementary school contexts. Most large-scale studies focus on national or cross-national datasets (OECD, 2020; OECD, 2023), while fewer empirical investigations explore how these variables interact within specific school environments shaped by distinct socio-cultural and institutional characteristics. As highlighted in recent leadership research, contextual factors may influence how supervision practices translate into improved instructional performance and student achievement (Hallinger et al., 2020; Leithwood et al., 2020).

This study responds to that gap by examining the joint impact of teacher supervision and teacher performance on students' learning outcomes in SDN Tanjung Lago 13. By situating the analysis within a specific elementary school setting, this research provides contextualized empirical evidence regarding how supervisory practices and teacher competency interact in influencing academic achievement. The use of multiple regression analysis allows for the identification of both independent and simultaneous predictive effects of supervision and performance on student outcomes.

The contribution of this study is twofold. First, it extends the literature on instructional supervision and teacher effectiveness by providing empirical findings from a localized Indonesian elementary school context. Second, it offers practical implications for school leaders and policymakers in designing supervision systems and professional development programs that directly support improved teaching quality and student performance.

Based on the background described above, this study aims to answer the following research question: What is the impact of teacher supervision and teacher performance on the learning outcomes of elementary school students in Tanjung Lago?

2. METHOD

This study applied a quantitative approach using a descriptive-correlational design to examine the relationship between teacher supervision, teacher performance, and students' learning outcomes. The correlational model was selected because the research aimed to identify the degree of association and predictive influence among variables without manipulating existing conditions within the school environment.

The research was conducted at SDN Tanjung Lago 13 during the academic year in which the study took place. The population included all teachers and students enrolled at the school. A purposive sampling technique was used to ensure that participants met specific criteria relevant to the research objectives. The final sample consisted of 50 teachers who had participated in supervisory activities and completed performance evaluations, as well as 200 students taught by those teachers. This alignment ensured that supervision practices, teacher performance data, and student learning outcomes were directly connected.

Data were collected through structured questionnaires, official school documentation, and academic records. Teacher supervision was measured using a Likert-scale questionnaire that assessed the frequency, quality, and follow-up of supervisory practices, including classroom observation, feedback sessions, and professional guidance provided by school leaders. The instrument was developed to reflect developmental supervision rather than administrative control. Prior to implementation, the questionnaire was reviewed to ensure content validity and tested for reliability to confirm internal consistency.

Teacher performance data were obtained from documented appraisal results and supported by a validated self-assessment instrument. The evaluation covered instructional planning, classroom management, clarity of instruction, student engagement, and assessment practices. These indicators were selected to represent essential dimensions of effective teaching. Scores were standardized to allow consistent comparison among teachers.

Student learning outcomes were measured using semester examination scores in core subjects obtained from official school records. These scores were used as objective indicators of academic achievement and represented cumulative student performance within the evaluation period.

Data analysis was conducted in several stages. Descriptive statistics were first used to summarize the characteristics of each variable. Pearson correlation analysis was then applied to determine the strength and direction of relationships between teacher supervision, teacher performance, and student learning outcomes. Finally, multiple regression analysis was conducted to examine the independent and simultaneous predictive effects of supervision and teacher performance on academic achievement. Statistical significance was determined at the 0.05 level.

3. RESULT AND DISCUSSION

Result

3.1 Descriptive Statistics

The first stage of analysis examined the descriptive characteristics of the three main variables: teacher supervision, teacher performance, and student learning outcomes. The results indicate that the implementation of teacher supervision at SDN Tanjung Lago 13 was relatively consistent and structured. Most teachers reported that supervision activities included classroom observation, feedback sessions, and follow-up discussions conducted by the school principal or senior supervisors.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Mean	Std. Deviation	Category
Teacher Supervision	50	3.87	0.54	Moderately High
Teacher Performance	50	4.02	0.48	High
Student Learning Outcomes	200	78.46	6.73	Moderate–High

The mean score for teacher supervision was 3.87, indicating that supervision practices were implemented regularly and perceived positively by teachers. Teacher performance showed a slightly higher mean score of 4.02, suggesting that most teachers demonstrated strong instructional competence in planning lessons, managing classrooms, and delivering instruction. Student learning outcomes, measured through semester examination scores, had an average of 78.46, indicating relatively satisfactory academic achievement among students.

3.2 Correlation Analysis

Pearson correlation analysis was conducted to examine the relationships between teacher supervision, teacher performance, and student learning outcomes.

Table 2. Pearson Correlation Analysis

Variables	1	2	3
1. Teacher Supervision	1		
2. Teacher Performance	.56**	1	
3. Student Learning Outcomes	.41**	.63**	1

The results reveal that teacher supervision has a moderate positive correlation with student learning outcomes ($r = 0.41, p < 0.05$). Meanwhile, teacher performance demonstrates a stronger positive correlation with student academic achievement ($r = 0.63, p < 0.05$). Additionally, teacher supervision is significantly correlated with teacher performance ($r = 0.56$), indicating that effective supervisory practices are associated with improved teacher instructional competence.

3.3 Multiple Regression Analysis

To examine the predictive effects of teacher supervision and teacher performance on student learning outcomes, a multiple regression analysis was conducted.

Table 3. Multiple Regression Results

Predictor	B	Beta	t	Sig.
Teacher Supervision	2.14	0.29	3.12	0.003
Teacher Performance	3.76	0.48	5.47	0.000

Model Summary

R	R ²	Adjusted R ²	F	Sig
0.68	0.46	0.44	24.63	0.000

The regression analysis shows that both teacher supervision and teacher performance significantly predict student learning outcomes ($p < 0.05$). The model explains approximately 46% of the variance in student academic achievement. Among the predictors, teacher performance demonstrates the stronger standardized coefficient ($\beta = 0.48$), indicating that instructional competence contributes more directly to student learning outcomes than supervision alone.

Discussion

The findings of this study demonstrate that teacher supervision plays an important role in improving educational outcomes, particularly through its influence on teacher instructional practices. The positive correlation between supervision and student learning outcomes suggests that structured supervision activities such as classroom observation, constructive feedback, and professional dialogue create opportunities for teachers to reflect on their teaching practices. These findings align with research emphasizing that instructional supervision functions as a developmental leadership strategy designed to enhance teaching quality rather than merely enforce administrative compliance (Hallinger & Wang, 2020; Zepeda & Ponticell, 2019).

Supervision becomes particularly effective when it is accompanied by meaningful feedback and professional support. When school leaders engage in instructional leadership practices that prioritize teacher development, they contribute indirectly to student achievement by improving the quality of classroom instruction (Liu et al., 2020; Robinson, 2022). In this context, supervision serves as a mechanism for guiding teachers toward more effective pedagogical strategies.

The results also indicate that teacher performance has a stronger direct influence on student learning outcomes compared to supervision alone. This finding is consistent with previous empirical studies highlighting teacher effectiveness as one of the most significant school-based determinants of student achievement (Chetty et al., 2019; Nguyen et al., 2020). Effective teaching practices including clear instruction, classroom management, and active student engagement are strongly associated with improved academic performance (Blazar & Kraft, 2020; Coe et al., 2020).

Furthermore, the regression analysis demonstrates that supervision and teacher performance operate in a complementary relationship. While teacher performance directly affects learning outcomes through instructional interactions, supervision contributes indirectly by shaping teacher professional development and instructional improvement. This finding supports research suggesting that school leadership influences student achievement largely through mediating variables such as teacher capacity, professional collaboration, and instructional quality (Tan et al., 2022; Leithwood et al., 2020).

The relationship between teacher performance and student achievement can also be explained through teacher–student interactions and classroom learning environments. High-quality interactions between teachers and students foster engagement, motivation, and deeper learning processes, which ultimately contribute to improved academic outcomes (Ansari & Pianta, 2019). Similarly, teachers' psychological characteristics, including motivation, self-

efficacy, and professional commitment, have been shown to influence teaching effectiveness and student performance (Bardach et al., 2021).

Another important implication of these findings relates to the role of professional learning within schools. Research suggests that continuous professional development, mentoring, and collaborative learning environments contribute to sustained improvements in teacher practice (Kraft & Hill, 2020; Harris et al., 2020). Therefore, supervision systems should be integrated with broader teacher development initiatives that encourage reflective practice and collaborative problem solving.

In the specific context of SDN Tanjung Lago 13, the results suggest that strengthening instructional supervision while simultaneously investing in teacher professional capacity can produce a mutually reinforcing cycle of improvement. Supervision provides direction and feedback, teacher performance translates that feedback into effective classroom practices, and students benefit through improved learning outcomes.

4. CONCLUSION

This study examined the impact of teacher supervision and teacher performance on elementary school students' learning outcomes at SDN Tanjung Lago 13. The results indicate that both variables significantly contribute to student academic achievement. Teacher supervision demonstrated a positive relationship with learning outcomes, suggesting that structured supervisory practices such as classroom observation and feedback support instructional improvement. However, teacher performance showed a stronger direct influence on student achievement, highlighting the central role of effective teaching practices in shaping learning outcomes.

The findings also reveal that supervision and teacher performance operate in a complementary relationship. Supervision serves as a developmental leadership mechanism that enhances teacher competence, while teacher performance represents the practical implementation of effective instructional strategies in the classroom. When both elements function together within a supportive school environment, they create conditions that foster improved student learning outcomes.

From a practical perspective, the results imply that schools should strengthen supervision systems that focus on professional guidance rather than administrative control. School leaders should provide constructive feedback, mentoring opportunities, and professional development programs to help teachers continuously improve their instructional practices. By aligning supervision with teacher capacity-building initiatives, schools can establish sustainable mechanisms for improving educational quality.

Future research could expand this study by involving larger samples across multiple schools or districts to enhance the generalizability of the findings. In addition, longitudinal research designs could explore how supervision practices influence teacher development and student achievement over time. Further studies may also examine additional mediating variables such as teacher collaboration, instructional innovation, and school organizational culture to better understand the complex relationships between leadership, teaching practices, and student learning outcomes.

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