

ACADEMIC SUPERVISION AND TEACHERS' PEDAGOGICAL COMPETENCE: A QUALITATIVE STUDY OF PRINCIPAL PRACTICE IN AN ELEMENTARY SCHOOL

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ABSTRACT

This study aims to examine the implementation of academic supervision conducted by the principal in improving teachers' pedagogical competence at SD Negeri Jombor, Jumo District. A qualitative descriptive approach was employed to explore the planning, implementation, follow-up, and impact of academic supervision on teachers' pedagogical practices. Data were collected through in-depth interviews, classroom observations, and document analysis involving the principal and teachers. The data were analyzed using an interactive model consisting of data reduction, data display, and conclusion drawing. The findings reveal that academic supervision has been implemented through structured planning and classroom observation; however, it has not been carried out optimally due to limited time, uneven supervision frequency, and the absence of systematic follow-up programs. Academic supervision contributes positively to improving teachers' pedagogical competence, particularly in lesson planning and instructional implementation, although improvements in student-centered learning and assessment practices remain limited. The study highlights the importance of needs-based, collaborative, and continuous academic supervision to enhance teachers' pedagogical competence effectively.

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INTRODUCTIONS

Primary education constitutes the fundamental foundation for the development of high-quality human resources. The success of education at the elementary school level is largely determined by the quality of the teaching

and learning processes implemented by teachers in the classroom. Teachers are not only responsible for delivering subject matter but also serve as facilitators who are capable of creating meaningful, contextual, and student-centered learning experiences. Therefore, enhancing teacher competence particularly pedagogical competence has become a crucial aspect of efforts to improve the quality of primary education.

Pedagogical competence refers to teachers' professional ability to understand learners' characteristics, design instructional plans, implement educative learning processes, and conduct continuous learning assessments. This competence lies at the core of teacher professionalism because it directly determines the quality of classroom instructional interactions (Darling-Hammond et al., 2017). Teachers with strong pedagogical competence tend to be more capable of creating effective, adaptive, and responsive learning environments that meet students' diverse needs (Kunter et al., 2013; Guerriero, 2017).

Nevertheless, numerous studies indicate that teachers' pedagogical competence continues to face various challenges. Teachers frequently encounter difficulties in developing innovative lesson plans, implementing active learning strategies, and consistently conducting authentic assessments (OECD, 2019; Hattie, 2015). These conditions underscore the importance of continuous professional development at the school level as a systematic effort to improve the quality of teachers' instructional practices.

One strategic form of professional development is academic supervision conducted by school principals. Academic supervision is understood as a planned and continuous professional support process aimed at improving the quality of teaching through classroom observation, reflective dialogue, and constructive feedback (Glickman et al., 2018). Academic supervision focuses on enhancing instructional practices rather than merely performing administrative control (Zepeda, 2017).

Within the context of educational leadership, school principals play a central role as instructional leaders who are responsible for improving instructional quality in schools. Hallinger (2016) emphasizes that principals' instructional leadership significantly contributes to enhancing teachers' capacity and the overall quality of teaching and learning. Principals who actively and effectively implement academic supervision are able to encourage teachers to engage in reflection, innovation, and continuous professional development (Leithwood et al., 2020).

A number of empirical studies have demonstrated that academic supervision positively influences teachers' pedagogical competence. Singerin (2021) reported that principals' academic supervision has a significant effect on the pedagogical competence and performance of elementary school teachers. This finding is supported by Awam et al. (2023), who confirmed that principals' academic supervision directly contributes to the improvement of teachers' pedagogical competence and teaching performance.

Well-planned, systematic, and continuous academic supervision has proven effective in improving the quality of teachers' instructional practices. Puspitasari (2024) showed that academic supervision encompassing planning, implementation, and evaluation stages significantly enhances teachers' pedagogical competence. This finding aligns with Sergiovanni's (2018) perspective, which emphasizes that humanistic and collaborative academic supervision is more effective in fostering changes in teachers' instructional practices.

Other studies have also revealed that the effectiveness of academic supervision is strongly influenced by the quality of supervision management and follow-up actions. Nikmah et al. (2025) found that principals' academic supervision plays an important role in improving elementary school teachers' pedagogical skills. Furthermore, Anshori and Andayani (2025) emphasized that effective academic supervision management—from planning to follow-up has a positive impact on enhancing teachers' pedagogical competence.

Academic supervision conducted through classroom observation, joint reflection, and constructive feedback encourages teachers to continuously improve their instructional practices. Yuliarsih et al. (2025) stated that structured academic supervision significantly enhances teachers' pedagogical competence. These findings are reinforced by a meta-analysis conducted by Aminah et al. (2024), which demonstrated that academic supervision has a positive and significant effect on teachers' pedagogical competence across various educational contexts.

Although numerous studies have confirmed the importance of academic supervision in improving teachers' pedagogical competence, its implementation at the elementary school level still encounters various contextual

challenges. Factors such as principals' workload, time constraints, and teachers' understanding of the essence of academic supervision often affect its effectiveness (Bush, 2020; Pont et al., 2019). Therefore, empirical studies focusing on the implementation of academic supervision by principals within specific elementary school contexts remain highly important.

Based on the foregoing discussion, this study focuses on the implementation of principals' academic supervision in improving teachers' pedagogical competence at SD Negeri Jombor, Jumo District. This research is expected to contribute theoretically to the development of academic supervision studies and practically to school principals and teachers in their efforts to enhance the quality of teaching and learning in primary schools.

METHOD

This study employed a qualitative approach with a descriptive research design. The qualitative approach was selected because the study aims to gain an in-depth understanding of the process of implementing principals' academic supervision in improving teachers' pedagogical competence, including the planning, implementation, and follow-up stages of academic supervision in the elementary school context. Qualitative research enables researchers to explore phenomena contextually and naturally in accordance with real conditions in the field.

The study was conducted at SD Negeri Jombor, Jumo District. The research site was selected based on the consideration that the school regularly implements academic supervision activities but still encounters various challenges in their implementation. The research was carried out during the even semester of the current academic year.

The research subjects in this study consisted of: (1) The school principal, as the main executor of academic supervision, (2) Elementary school teachers, as the parties who receive and implement the outcomes of academic supervision. Research informants were selected using purposive sampling, based on their direct involvement in academic supervision activities and their understanding of the teaching and learning processes at the school.

Data in this study were collected using the following techniques: (1) In-depth interviews. Semi-structured interviews were conducted with the school principal and teachers to obtain information regarding the planning, implementation, and follow-up of academic supervision, as well as its impact on teachers' pedagogical competence. (2) Observation. Observations were carried out to directly examine the implementation of academic supervision and teachers' instructional practices in the classroom, including teaching strategies, classroom management, and teacher-student interactions. (3) Document analysis. Documentation was used to support and strengthen the research data, including academic supervision program documents, supervision schedules, supervision instruments, supervision assessment results, and teachers' instructional documents (lesson plans/teaching modules).

The primary instrument in this qualitative study was the researcher him/herself (human instrument), supported by interview guidelines, observation sheets, and documentation checklists. Supporting instruments were developed based on indicators of academic supervision and teachers' pedagogical competence to ensure that the data collected were relevant to the research focus.

Data analysis was conducted interactively and continuously, following the model proposed by Miles, Huberman, and Saldaña, which consists of: (1) Data reduction, namely the process of selecting and simplifying data relevant to the research focus. (2) Data display, which involves organizing data in the form of descriptive narratives to facilitate understanding. (3) Conclusion drawing and verification, namely the process of interpreting data to obtain valid and meaningful research findings. Data analysis was carried out from the data collection stage until the completion of the study, allowing for continuous deepening and refinement of the findings.

To ensure data trustworthiness, this study employed triangulation techniques, including: (1) Source triangulation, by comparing data obtained from the school principal and teachers. (2) Technique triangulation, by comparing data from interviews, observations, and documentation. In addition, member checking was conducted with informants to ensure consistency between the collected data and actual conditions.

This study was conducted in accordance with research ethics principles, including obtaining official permission from the school, maintaining the confidentiality of informants' identities, and ensuring that all informants provided informed consent prior to data collection.

RESULT AND DISCUSSION

Result

The research findings were obtained through in-depth interviews, classroom observations, and document analysis. The data were analyzed thematically based on the research focus, namely: (1) planning of academic supervision, (2) implementation of academic supervision, (3) follow-up of academic supervision, and (4) the impact of academic supervision on teachers' pedagogical competence.

Planning of Academic Supervision by the School Principal

The findings indicate that the school principal prepared the academic supervision plan at the beginning of the academic year. The supervision planning included the development of an annual supervision program, a supervision schedule, and the selection of instructional supervision instruments. The supervision program was designed with reference to the school academic calendar and teachers' professional development needs.

However, the planning of academic supervision had not been fully developed collaboratively with teachers. Several teachers reported that they were not actively involved in determining the focus of supervision, which caused academic supervision to still be perceived as an evaluative activity rather than a form of professional guidance.

Table 1. Findings on Academic Supervision Planning

Planning Aspect	Main Findings
Supervision program	Developed in the form of an annual program
Supervision schedule	Available but not yet flexible
Supervision instruments	Using standard school instruments
Teacher involvement	Still limited
Supervision focus	General and not yet based on individual needs

Implementation of Academic Supervision

The implementation of academic supervision was carried out through classroom observations. The school principal observed the teaching and learning process from the opening activities to the core and closing activities. Supervision was conducted using observation sheets that covered aspects of lesson planning, instructional strategies, classroom management, and the use of learning media.

The observation results indicate that academic supervision was not conducted routinely for all teachers. Supervision tended to focus on certain teachers and had not been evenly distributed. In addition, the time allocated for supervision was relatively limited because the school principal also had other administrative and managerial responsibilities.

Table 2. Findings on the Implementation of Academic Supervision

Implementation Aspect	Findings
Supervision technique	Classroom observation
Frequency of supervision	Not routine and not evenly distributed
Observation focus	Teaching-learning process and classroom management
Supervision approach	Tends to be directive
Main constraint	Limited time of the school principal

Follow-up of Academic Supervision

Follow-up actions of academic supervision were conducted through feedback provided to teachers after classroom observations. The feedback was generally delivered orally in the form of suggestions for improving

teaching practices. Several teachers stated that the feedback helped them identify weaknesses in their instructional practices.

Nevertheless, the follow-up of academic supervision was not accompanied by structured professional development programs, such as in-house training, teacher group discussions, or intensive mentoring. As a result, the outcomes of supervision had not been optimally utilized for continuous teacher professional development.

Table 3. Findings on Follow-up of Academic Supervision

Follow-up Aspect	Findings
Type of feedback	Oral
Timing of feedback	After classroom observation
Documentation of supervision results	Not yet optimal
Follow-up development programs	Not yet structured
Immediate impact	Increased teachers' reflective awareness

Impact of Academic Supervision on Teachers' Pedagogical Competence

The findings indicate that academic supervision had a positive impact on improving teachers' pedagogical competence, particularly in the aspects of lesson planning and instructional implementation. Teachers began to improve their instructional documents, apply more varied teaching methods, and enhance interactions with students.

However, improvements in pedagogical competence were not evenly observed across all aspects. Some teachers still experienced difficulties in implementing student-centered learning and conducting authentic assessment consistently.

Table 4. Impact of Academic Supervision on Teachers' Pedagogical Competence

Pedagogical Competence Aspect	Condition Before Supervision	Condition After Supervision
Lesson planning	Less systematic	More structured
Instructional strategies	Less varied	More varied
Classroom management	Less optimal	More conducive
Use of learning media	Limited	Becoming more innovative
Learning assessment	Conventional	Not yet optimal

Overall, the findings indicate that the implementation of academic supervision by the school principal at SD Negeri Jombor, Jumo District, has been carried out but has not yet been fully optimal. Academic supervision has contributed to the improvement of teachers' pedagogical competence, particularly in lesson planning and instructional implementation. The main constraints identified include the limited time availability of the school principal, the lack of optimal collaborative planning, and the absence of structured and sustainable follow-up supervision programs.

Discussion

Planning of Academic Supervision by the School Principal

The findings indicate that the school principal has prepared academic supervision planning in the form of an annual program, a supervision schedule, and instructional supervision instruments. This finding is consistent with the views of Glickman, Gordon, and Ross-Gordon (2018), who emphasize that supervision planning is a critical initial stage that determines the effectiveness of academic supervision implementation. Systematic planning enables supervision to be conducted in a focused manner and oriented toward improving the quality of teachers' instructional practices.

However, the findings also reveal that academic supervision planning has not been fully collaborative and has not yet been based on teachers' individual needs. This condition is less aligned with modern supervision approaches that emphasize the importance of teachers' needs analysis as the foundation for supervision planning (Zhang & Ng,

2016). Supervision that is not needs-based tends to be less effective in encouraging changes in teachers' instructional practices (Blase & Blase, 2019). Furthermore, teacher involvement in supervision planning has been shown to enhance teachers' sense of ownership and acceptance of the supervision process (Liu & Hallinger, 2018).

Implementation of Academic Supervision in Teaching and Learning

The implementation of academic supervision at SD Negeri Jombor is conducted through classroom observations using supervision instruments that cover aspects of lesson planning, instructional implementation, and classroom management. This finding aligns with Zepeda's (2017) assertion that classroom observation is the primary technique in academic supervision for obtaining an authentic picture of teachers' instructional practices.

Nevertheless, academic supervision has not been carried out routinely or evenly across all teachers. This limitation is primarily due to the school principal's time constraints, as the principal is also responsible for various managerial duties. This finding supports the results of studies by Bush (2020) and Pont et al. (2019), which indicate that principals' workload often becomes a major constraint in the optimal implementation of academic supervision. Other studies further suggest that the effectiveness of academic supervision is strongly influenced by principals' instructional leadership capacity and the level of support provided by the school system (Robinson et al., 2017; Day et al., 2016).

Follow-up of Academic Supervision

In this study, the follow-up of academic supervision was conducted through the provision of oral feedback to teachers after classroom observations. Such feedback helped teachers to identify their strengths and weaknesses in instructional practices. This finding is consistent with Hattie's (2015) view that feedback is one of the most influential factors in improving the quality of teaching and learning.

However, the follow-up of supervision has not yet been integrated into a sustainable professional development program. Previous research has demonstrated that supervision accompanied by coaching and mentoring produces a more significant impact on the improvement of teachers' pedagogical competence (Kraft et al., 2018; Sims & Fletcher-Wood, 2021). Supervision that is not systematically followed up tends to result in temporary and unsustainable changes in teaching practices (Desimone & Pak, 2017).

Impact of Academic Supervision on Teachers' Pedagogical Competence

The findings indicate that academic supervision has a positive impact on the improvement of teachers' pedagogical competence, particularly in the areas of lesson planning and instructional implementation. Teachers have begun to show improvements in the preparation of instructional materials, the use of more varied teaching methods, and more effective classroom management. These findings are consistent with studies by Singerin (2021) and Awam et al. (2023), which report that principals' academic supervision has a significant influence on the enhancement of teachers' pedagogical competence.

Nevertheless, improvements in pedagogical competence have not been evenly distributed, particularly in the areas of learning assessment and student-centered learning. This finding aligns with the conclusions of Darling-Hammond et al. (2017) and Timperley et al. (2020), who argue that changes in pedagogical practices require time, continuous support, and a reflective school culture. Without systemic support, academic supervision tends to affect only the technical aspects of teaching and learning (OECD, 2019).

Theoretical Synthesis of Research Findings

Overall, the findings of this study reinforce instructional leadership theory, which positions academic supervision as a key instrument for improving the quality of teaching and learning (Hallinger, 2016; Leithwood et al., 2020). Effective academic supervision requires needs-based planning, consistent implementation, and structured follow-up through coaching and professional reflection (Robinson et al., 2017; Sims & Fletcher-Wood, 2021).

Thus, the findings of this study not only confirm previous research but also emphasize that suboptimal implementation of academic supervision results in only partial improvements in teachers' pedagogical competence. Therefore, strengthening school principals' capacity as academic supervisors is a critical prerequisite for improving instructional quality in elementary schools (Day et al., 2016; Zhang & Ng, 2016).

CONCLUSION

This study concludes that the principal's academic supervision at SD Negeri Jombor, Jumo Subdistrict, has been implemented through planning, implementation, and follow-up stages; however, it has not yet been fully optimal. Supervision planning has been prepared but has not been sufficiently needs-based or collaborative, the implementation through classroom observation has not been conducted routinely or evenly, and follow-up activities remain limited to feedback without structured and continuous professional development.

Academic supervision has contributed positively to the improvement of teachers' pedagogical competence, particularly in lesson planning and instructional implementation. Nevertheless, the improvement has not been evenly distributed across all pedagogical dimensions, especially in learning assessment and student-centered instruction, indicating that the effectiveness of academic supervision strongly depends on consistent implementation and sustainable follow-up.

The novelty of this study lies in its implementation-focused analysis of academic supervision in a public elementary school context, highlighting the linkage between supervision stages and pedagogical competence improvement. However, the study is limited to a single school and a qualitative approach, restricting generalizability. Future research is recommended to employ mixed-methods designs, involve more schools, and examine the effectiveness of collaborative or coaching-based supervision models to strengthen sustainable improvements in teaching quality.

REFERECES

- Aminah, N., Kartono, K., & Rusilowati, A. (2024). Pengaruh supervisi akademik dalam meningkatkan kompetensi pedagogik guru: Sebuah meta-analisis. *Jurnal Hurriah: Jurnal Evaluasi Pendidikan dan Penelitian*, 3(3), 45–56. <https://doi.org/10.56806/jh.v3i3.94>
- Anshori, A. R., & Andayani, W. D. (2025). Principal academic supervision management in improving teachers' pedagogic competence. *Journal of Science and Education*, 6(1), 1–12. <https://doi.org/10.58905/jse.v6i1.625>
- Awam, R., Rifma, R., Hadiyanto, H., & Sabandi, A. (2023). The contribution of principal's academic supervision and pedagogical competence to teacher performance. *Indonesian Research Journal in Education*, 7(2), 529–544. <https://doi.org/10.22437/irje.v7i2.31476>
- Blase, J., & Blase, J. (2019). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Educational Administration Quarterly*, 55(5), 769–798. <https://doi.org/10.1177/0013161X19850805>
- Bush, T. (2020). School leadership and management in the 21st century. *Educational Management Administration & Leadership*, 48(3), 401–415. <https://doi.org/10.1177/1741143219884075>
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies. *Educational Administration Quarterly*, 52(2), 221–258. <https://doi.org/10.1177/0013161X15616863>
- Desimone, L. M., & Pak, K. (2017). Instructional coaching as high-quality professional development. *Theory Into Practice*, 56(1), 3–12. <https://doi.org/10.1080/00405841.2016.1241947>
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2018). *Supervision and instructional leadership: A developmental approach* (10th ed.). Pearson Education.
- Guerriero, S. (Ed.). (2017). *Pedagogical knowledge and the changing nature of the teaching profession*. OECD Publishing.
- Hallinger, P. (2016). Bringing context out of the shadows of leadership. *Educational Management Administration & Leadership*, 46(1), 5–24. <https://doi.org/10.1177/1741143216670652>

- Hattie, J. (2015). The applicability of visible learning to higher education. *Scholarship of Teaching and Learning in Psychology*, 1(1), 79–91. <https://doi.org/10.1037/stl0000021>
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547–588. <https://doi.org/10.3102/0034654318759268>
- Kunter, M., Baumert, J., Blum, W., Klusmann, U., Krauss, S., & Neubrand, M. (2013). *Professional competence of teachers: Effects on instructional quality and student development*. Springer.
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5–22. <https://doi.org/10.1080/13632434.2019.1596077>
- Liu, S., & Hallinger, P. (2018). Principal instructional leadership, teacher self-efficacy, and teacher professional learning in China: Testing a mediated-effects model. *Educational Administration Quarterly*, 54(4), 501–528. <https://doi.org/10.1177/0013161X18769048>
- Nikmah, N., Haryati, T., & Sumarno, S. (2025). The role of the principal as a supervisor in enhancing teachers' pedagogical competence. *Sosioedukasi*, 14(3), 210–220. <https://doi.org/10.36526/sosioedukasi.v14i3.5996>
- OECD. (2019). *Education at a glance 2019: OECD indicators*. OECD Publishing.
- Puspitasari, M. (2024). Supervisi akademik dalam meningkatkan kompetensi pedagogik guru. *Academia: Jurnal Inovasi Riset Akademik*, 2(3), 145–156. <https://doi.org/10.51878/academia.v2i3.1473>
- Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2017). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, 53(4), 635–674. <https://doi.org/10.1177/0013161X17699835>
- Singerin, S. (2021). The impact of academic supervision on teacher pedagogical competence and teacher performance: The role moderating by teacher efficacy. *International Journal of Elementary Education*, 5(3), 496–504. <https://doi.org/10.23887/ijee.v5i3.34072>
- Sims, S., & Fletcher-Wood, H. (2021). Identifying the characteristics of effective teacher professional development. *Educational Research Review*, 33, 100403. <https://doi.org/10.1016/j.edurev.2021.100403>
- Timperley, H., Ell, F., Le Fevre, D., & Twyford, K. (2020). Leading professional learning: Practical strategies for impact in schools. *Professional Development in Education*, 46(2), 204–219. <https://doi.org/10.1080/19415257.2019.1694059>
- Yuliarsih, T., Maryanto, M., & Abdullah, G. (2025). Implementation of academic supervision in improving teachers' pedagogical competence. *International Journal of Cultural and Social Science*, 6(4), 310–320. <https://doi.org/10.53806/ijcss.v6i4.1182>
- Zepeda, S. J. (2017). *Instructional supervision: Applying tools and concepts* (4th ed.). Routledge. <https://doi.org/10.4324/9781315670453>
- Zhang, Y., & Ng, D. (2016). A review of principal leadership styles and teacher professional development. *Educational Management Administration & Leadership*, 44(4), 560–576. <https://doi.org/10.1177/1741143214535745>