



Implementation of Principal Academic Supervision to Improve the Pedagogical Competence of Elementary School Teachers

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Abstract: Academic supervision is an important factor in ongoing professional development efforts to improve the quality of learning. This study aims to describe the implementation of academic supervision by the principal in improving the pedagogical competence of teachers at SD Negeri 06 Tegalsari, Pemalang Regency. The study used a descriptive qualitative approach with the principal, class teachers, and subject as teachers as subjects. Data were collected through in-depth interviews, observation, and documentation, then analyzed using the Miles and Huberman interactive analysis model, which includes data reduction, data presentation, and conclusion drawing. The results show that academic supervision is implemented through three stages: planning, implementation, and evaluation and follow-up. In the planning stage, the principal collaboratively involves teachers in developing objectives, schedules, and supervision instruments. Supervision is carried out in a humanistic and reflective manner, emphasizing dialogue and professional mentoring, rather than merely administrative supervision. Evaluation is carried out through joint reflection and follow-up in the form of ongoing coaching that encourages teachers to improve learning practices. The implementation of academic supervision has been proven to improve teachers' pedagogical competence in designing teaching materials, selecting appropriate learning strategies, and conducting meaningful learning evaluations. Thus, planned, collaborative, and reflective academic supervision can be a strategic instrument in developing teacher professionalism and improving the quality of education in elementary schools.

Keywords: Academic supervision; Elementary school teachers; Pedagogical competenc; Principal

Introduction

Education is the primary foundation for developing superior, character-based, and competitive human resources in the global era. Efforts to improve the quality of education are a strategic priority in national development (Setyaningsih, 2022; Suyana et al., 2024), as educational success is largely determined by the quality of teachers, who spearhead the implementation of learning in schools (Azainil et al., 2021; Sihotang & Sirear, 2024). Competent teachers are not only able to deliver learning materials but also create an active,

creative, and enjoyable learning environment (Nguyen et al., 2022). Therefore, improving teacher competence is a crucial aspect that requires serious attention from the government and all education stakeholders. One strategy proven effective in improving teacher competence is through the implementation of academic supervision by school principals (Susanto et al., 2025; Wiyono et al., 2025). Academic supervision is not merely administrative but also a systematic and ongoing professional development process to improve the quality of learning. Emphasized that academic supervision plays a significant role in improving

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teachers' pedagogical competence by providing constructive feedback on teaching practices. Regulation of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia Number 40 of 2021 assigns school principals to supervise teachers to improve the quality of learning and student learning outcomes. Furthermore, Regulation of the Director General of Teachers and Education Personnel Number 2626/B/HK.04.01/2023 concerning the Teacher Competency Model emphasizes that the development of teachers' pedagogical competence needs to be carried out continuously through professional mentoring and targeted supervision activities.

Various studies have shown that collaborative academic supervision can increase teacher motivation, responsibility, and professionalism (Irzawati et al., 2025; Lorensius et al., 2022). When supervision is implemented with a guiding approach, not a judgmental one, teachers will feel valued and encouraged to continue innovating in learning (Ahmadi & Weisi, 2024; Wiyono et al., 2021). However, academic supervision practices across elementary schools are not evenly implemented (Alam et al., 2021). Differences in learning quality between schools are often related to the extent to which academic supervision is optimally implemented by the principal. One example of a school demonstrating effective academic supervision practices is SD Negeri 06 Tegalsari, Ampelgading District, Pematang Regency. A pre-survey conducted by researchers revealed that the quality of learning at this school improved by 7.14%, characterized by a more conducive classroom atmosphere, increased variety of learning strategies, and improved psychological and cognitive support from teachers to students. Furthermore, teacher reflection and innovation in learning increased by 12.61%, indicating that teachers actively improve their teaching practices based on experience and supervision results.

This improvement in quality also impacted student achievement. SD Negeri 06 Tegalsari has won various awards at the sub-district and district levels, both in academic and non-academic fields, such as winning the National Science Olympiad, the MAPSI competition, POPDA, the Mother Language Shoots Festival, and the FLS2N competition. This success demonstrates that consistent and constructive academic supervision contributes significantly to creating a positive and productive learning climate. These findings align with previous research, which emphasized that the success of academic supervision is significantly influenced by the principal's leadership, acting as a mentor, facilitator, and motivator for teachers (Majid, 2024; Ayumi & Nasution, 2025; Marfinda, 2022; Warman, 2022; W. Wiyono et al., 2025). The results of a follow-up pre-survey indicate that academic supervision activities at SD Negeri 06 Tegalsari are implemented in a structured manner

through three main stages: planning, including outreach, work meetings, and agreement on the schedule and supervision instruments; implementation, including class visits and coordination between the principal and teachers; and evaluation and follow-up, including analysis of supervision results and providing feedback for instructional improvement. This process demonstrates how the principal actively assists teachers in continuously improving their pedagogical competence.

Based on this description, it can be concluded that academic supervision plays a strategic role in improving teacher pedagogical competence, particularly in the elementary school context. However, each school has its own dynamics in its implementation, so a more in-depth study is needed to understand the contextual implementation of academic supervision. Therefore, this study aims to describe the planning, implementation, evaluation, and follow-up of the principal's academic supervision in improving the pedagogical competence of teachers at SD Negeri 06 Tegalsari, Ampelgading District, Pematang Regency. The results of this study are expected to provide an empirical contribution to the development of academic supervision practices and the improvement of elementary school teacher professionalism.

Method

This study used a descriptive qualitative approach aimed at providing an in-depth description of the principal's implementation of academic supervision in improving teachers' pedagogical competence. This approach was chosen because it allows researchers to understand the phenomenon contextually and holistically through direct interaction with the research subjects (Chai et al., 2021; Villamin et al., 2025). The study was conducted at SD Negeri 06 Tegalsari, Ampelgading District, Pematang Regency, from May to November 2025, focusing on the planning, implementation, evaluation, and follow-up of academic supervision. The research subjects were selected purposively, including the principal as the academic supervisor and the teachers as the supervisees. Subject selection was based on their relevance and direct involvement in supervision activities at the school.

The research data consisted of primary and secondary data. Primary data were obtained through in-depth interviews, direct observation, and field documentation, while secondary data were obtained from school archives, supervision reports, and other supporting documents related to teacher development activities. The primary instrument in this study was the researcher herself (human instrument), as she served as the data collector, analyst, and interpreter. To strengthen

the validity of the findings, the researcher used supporting instruments in the form of interview guides, observation sheets, and documentation sheets. The interview guides were semi-structured to allow for more flexibility in data collection while maintaining a focus on the topic of academic supervision. The observation sheets were used to record the behavior and interactions of the principal and teachers during the learning process and supervision activities. Data collection techniques utilized three main methods: observation, in-depth interviews, and documentation. Direct observations were conducted within the school environment to observe the implementation of supervision and teacher learning activities. Interviews were conducted with the principal and teachers to gain a deeper understanding of the planning, implementation, and follow-up of academic supervision.

Documentation was used to collect written data such as supervision work plans, observation reports, teacher reflection notes, and evidence of professional development activities. All data obtained were then verified through triangulation of sources, techniques, and time to ensure the validity and credibility of the information.

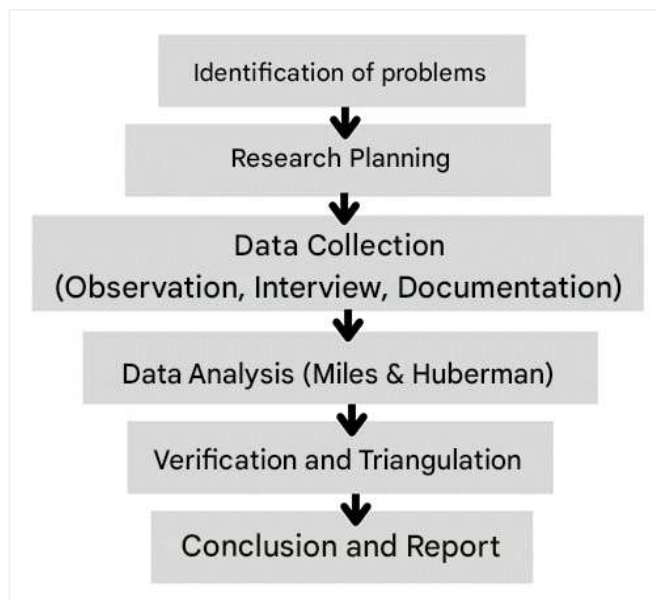


Figure 1. Research procedure

Data analysis was conducted using the Miles and Huberman interactive analysis model, which includes four main stages: data collection, data reduction, data presentation, and conclusion drawing or verification. The analysis process was conducted simultaneously from the beginning of data collection until the end of the study, organizing, interpreting, and deciphering the meaning of the collected data to obtain a complete picture of the principal's implementation of academic supervision in improving teacher pedagogical

competence. The validity of the research findings was strengthened through member checking, discussions with colleagues, and comprehensive documentation of field evidence, ensuring a high level of credibility and dependability.

Result and Discussion

Academic Supervision Planning

Research results indicate that academic supervision planning is carried out collaboratively and participatively between the principal and teachers. The principal plays an active role in designing supervision objectives, setting schedules, and preparing observation instruments relevant to teacher needs. This process is carried out through a work meeting at the beginning of the school year, in which teachers are directly involved to agree on the objectives and focus of supervision activities. The principal explained that "supervision activities are planned together with teachers through work meetings, so that the objectives and focus are mutually agreed upon" (W. Ks). Class teachers also confirmed that the principal always provides advance information regarding the schedule and instruments to be used.

This was conveyed by the statement, "Usually we already know when we will be supervised, so we can prepare learning materials" (W. Gk). This approach fosters teacher readiness, both technically and psychologically, so that supervision is more effective and does not generate resistance. Furthermore, interviews indicate that the principal consistently socializes the academic supervision program to all teachers through official school meetings. This socialization not only explains the technical aspects but also emphasizes the goals of teacher professional development and development. A subject teacher stated, "Before the implementation, the principal explained the objectives and techniques so that we wouldn't be nervous" (W. Gm). Thus, the planning stage at this school reflects a supervisory culture that is open, collaborative, and oriented toward improving the quality of learning.

Implementation of Academic Supervision

The implementation of academic supervision at SD Negeri 06 Tegalsari demonstrates a humanistic, reflective, and development-oriented approach. The principal emphasizes supervision as a professional mentoring process rather than administrative assessment. This is evident in his statement, "I prefer to come into the classroom and have a dialogue afterward, rather than judging" (W. Ks). This approach provides space for teachers to openly discuss the strengths and weaknesses of teaching without feeling closely

monitored. The classroom teacher corroborated this finding by stating, "The principal never gets angry, but gives suggestions in a relaxed manner" (W. Gk). This conducive supervisory atmosphere builds professional relationships based on trust, making teachers more open to criticism and suggestions.

In addition to communication aspects, supervision also involves direct observation of learning activities. The principal regularly attends classes to observe how teachers deliver material, manage the classroom, and use learning media. A subject teacher stated, "The principal comes into the classroom while we are teaching to see how we deliver the material" (W. Gm). These observations serve as the basis for the principal to provide more contextual and specific feedback. Interview results also indicated that the principal consistently provided motivational reinforcement and encouragement for innovation after supervision. A class teacher stated that "after supervision, he motivated us to continue innovating" (W. Gk). Thus, supervision at this school is not solely focused on monitoring but also serves as a two-way learning process that fosters teachers' self-development.

Academic Supervision Evaluation and Follow-up

The evaluation and follow-up phase is a crucial part of the academic supervision cycle. Research shows that evaluations are conducted reflectively through joint discussions between the principal and teachers. The principal stated, "After the observation, we sit together to discuss the results and find solutions" (W. Ks). This type of evaluation positions teachers as reflective partners who share responsibility for improving the quality of learning. Teachers receive constructive feedback in the form of notes on improvements to lesson plans, teaching methods, and student learning assessment strategies. A class teacher stated, "We were given notes and suggestions for improving lesson plans and methods" (W. Gk). A subject teacher added, "After that, there's usually follow-up mentoring" (W. Gm). This indicates that follow-up supervision does not stop at providing advice, but continues with coaching activities in the form of consultations and individual mentoring.

The principal also explained that supervision results are used to develop teacher development programs, such as internal training and lesson study. He stated, "Now teachers are more open, have more complete tools, and are more active in innovating" (W. Ks). Based on these findings, academic supervision has been proven to have a significant impact on improving teachers' pedagogical competence, both in planning, implementing, and reflecting on learning. Thus, the implementation of academic supervision at SD Negeri 06 Tegalsari reflects a continuous professional development process. The principal acts as a mentor,

facilitator, and motivator for teachers to continuously develop their competencies. The well-planned, well-executed, and reflectively followed-up stages of supervision have created a culture of collective learning at the school, positively impacting the quality of learning and teacher professionalism.

Discussion

The results of this study indicate that the implementation of academic supervision by the principal at SD Negeri 06 Tegalsari, Ampelgading District, Pematang Regency, was systematic, participatory, and oriented towards teacher professional development. Supervision is not viewed as an administrative oversight activity, but rather as a reflective coaching process aimed at continuously improving teachers' pedagogical competence (Ameli et al., 2024; Azizi et al., 2025; Surtiati et al., 2025). This pattern emphasizes the principal's role as an instructional leader who motivates teachers to develop their teaching skills through dialogue, reflection, and mentoring. This finding aligns with the views of Khaef et al. (2021), Naz et al. (2025), and Arshad et al. (2025), who state that the success of academic supervision is determined by the extent to which the principal is able to create a collaborative atmosphere that encourages teachers to learn from their own teaching experiences.

The implementation of supervision at SD Negeri 06 Tegalsari demonstrates that all stages, from planning and observation to follow-up, are carried out with the principles of openness and collaboration. The principal involves teachers from the outset, particularly in formulating supervision objectives, determining the schedule, and preparing observation instruments. This involvement fosters a sense of ownership of the program and enhances teachers' professional awareness and active participation. This approach aligns with research findings (Hamka, 2023), which confirm that academic supervision based on dialogue and participation strengthens teachers' accountability for learning quality. In this context, supervision is no longer top-down but rather a shared leadership process in which the principal and teachers work together to develop a vision for improving learning quality. The principal's approach to supervision also reflects humanistic principles, where relationships with teachers are built on trust, empathy, and respect for professionalism (Effendi & Sahertian, 2023; Effendi et al., 2023; Nurdyanti et al., 2021). The principal attempted to create supportive interactions through direct classroom observations and subsequent reflective conversations. Teachers responded with openness, feeling valued, and unburdened by the supervision activities. This practice demonstrates the application of the clinical supervision model, which emphasizes the importance of two-way communication

between supervisors and teachers to find solutions for learning development (Fahra & Syukri, 2025; Mncina et al., 2024; Rabiul et al., 2022). These findings also align with research suggesting that an empathetic supervision style can increase teachers' motivation and confidence in innovation (Li et al., 2024; Manke et al., 2025).

Furthermore, the principal's academic supervision does not stop at the observation stage but is followed by concrete follow-up (Katz & Moè, 2024; Stumbrienė et al., 2024). The principal provides direct feedback after learning activities and then provides follow-up mentoring to address weaknesses and strengthen existing strengths. This collaborative reflection process enables teachers to assess their own teaching practices and strive to improve them based on the feedback received. This follow-up model reflects the principle of continuous professional development (CPD), as explained by Hooda et al. (2022) and Yu (2023), namely ongoing development through a cycle of evaluation and reflection. This approach makes supervision not a one-time activity, but an integral part of the school's professional learning culture. Empirically, the impact of academic supervision at SD Negeri 06 Tegalsari is evident in the teachers' improved ability to design learning materials, select strategies appropriate to student characteristics, and evaluate learning outcomes more meaningfully. Teachers also demonstrate increased motivation to innovate and reflect on their teaching practices. These findings support research showing that schools with consistent supervision systems tend to have teachers with higher pedagogical competence and more effective learning (Javornik et al., 2023).

In other words, continuous and reflective academic supervision is a strategic instrument in achieving quality learning. From a theoretical perspective, the results of this study confirm that effective academic supervision is inseparable from a transformative instructional leadership approach. The principal's role is not only as an evaluator but also as a facilitator, motivator, and professional mentor for teachers. This principle aligns with the 21st-century educational leadership paradigm, which places collaboration and reflection as key to improving the quality of learning (Zhou et al., 2025; Shaikh et al., 2023). Therefore, the implementation of coaching-oriented academic supervision, as implemented at SD Negeri 06 Tegalsari, can serve as a model for good practice in developing teacher professionalism in elementary schools. Thus, collaborative, reflective, and ongoing academic supervision has proven effective in improving teachers' pedagogical competence. This success depends not only on the principal's technical skills in conducting observations, but primarily on their ability to build positive interpersonal relationships and foster a culture

of collaborative learning (Zhang et al., 2023; Zamiri & Esmaeili, 2024). Humanistic supervision and teacher development orientation transform schools into professional learning communities, where every teacher has the opportunity to develop and contribute to the continuous improvement of educational quality (Christensen & Jerrim, 2025; Vičič Krabonja et al., 2024).

Conclusion

This study concludes that the implementation of academic supervision by the principal at SD Negeri 06 Tegalsari, Ampelgading District, Pematang Regency, has been proven to play a significant role in improving teachers' pedagogical competence. Supervision is carried out in a planned, systematic, and development-oriented manner, not merely as administrative oversight. The process includes collaborative planning between the principal and teachers, humanistic implementation through direct classroom observation and reflective dialogue, and evaluation and follow-up based on ongoing professional mentoring. The principal acts as a facilitator, guide, and motivator who fosters teachers' reflective awareness of their learning practices. Through an open and continuous supervision process, teachers become more active in improving teaching materials, increasing the variety of learning strategies, and building a conducive and student-centered learning environment. Thus, academic supervision oriented toward professional development can be a strategic instrument in realizing improvements in the quality of education at the elementary school level.

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Author Contributions

Conceptualization; methodology; validation; formal analysis; investigation; resources; W.; data curation; R; writing—original draft preparation; S.; writing—review and editing; visualization: M. All authors have read and approved the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest

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