

Strategic Leadership through Academic Supervision for Improving Graduate Quality in *Pesantren* based *Madrasah*

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Abstract

Improving graduate quality has become a strategic priority for Islamic educational institutions in responding to increasingly complex educational demands. However, studies examining how strategic leadership is enacted through academic supervision in *pesantren*-based *madrasah* remain limited. This study aims to analyze how strategic leadership is implemented through academic supervision to improve graduate quality at *pesantren*-based *madrasah*. A qualitative case study design was employed at Madrasah Aliyah Pondok Pesantren Alkhairaat Mainatul Ilmi. Data were collected through in-depth interviews, participant observation, and document analysis involving the principal, teachers, vice principals, and students. The data were analyzed using an interactive model consisting of data condensation, data display, and conclusion drawing, while credibility was ensured through source and method triangulation. The findings reveal that strategic leadership is translated into a collaborative and mentoring-oriented academic supervision process aligned with the vision and values of the *pesantren*. This approach strengthens teachers' professional efficacy, improves instructional quality, and contributes to better academic achievement and character development among students. The study concludes that integrating strategic leadership with adaptive academic supervision creates a sustainable mechanism for improving graduate quality. These findings contribute to the literature by demonstrating that the integration of value-based leadership and collaborative supervision within the unique culture of *pesantren* offers an effective model for enhancing educational quality in Islamic schools.

Keywords: academic supervision; graduate quality; madrasah; strategic leadership

1. Introduction

Graduate quality has become one of the primary indicators of educational effectiveness in the face of rapid technological transformation, globalization, and increasingly competitive labor markets (Arredondo-Trapero et al., 2024; Awashreh, 2026). Educational institutions are expected not only to produce graduates with strong academic competencies but also to cultivate critical thinking, adaptability, ethical values, and lifelong learning skills (Dumitru & Halpern, 2023; Kumar, 2025). For *pesantren* based *madrasah*, these expectations are even more demanding because graduates are required to demonstrate

academic excellence while maintaining strong Islamic values and moral integrity (Orgianus et al., 2024; Syauqi et al., 2025). Despite these expectations, many *madrasah* continue to face challenges in improving graduate quality due to disparities in teacher competence, limited instructional innovation, and weaknesses in institutional quality management. These conditions indicate that improving graduate quality requires not only curriculum development but also effective educational leadership capable of ensuring continuous improvement in teaching and learning processes.

Responding to these challenges requires school leadership that extends beyond routine administrative management (Andrin et al., 2023; Constantinides, 2025). As the key driver of institutional development, the principal plays a central role in shaping educational quality by aligning organizational vision with instructional improvement (Ralebese et al., 2025; Yakob et al., 2025). In increasingly dynamic educational environments, conventional leadership approaches are often insufficient to address complex institutional challenges and continuously changing educational demands. Strategic leadership therefore becomes essential because it enables school leaders to anticipate change, mobilize organizational resources, foster innovation, and maintain institutional adaptability while ensuring that long-term goals are translated into everyday educational practices. Within the context of *madrasah*, strategic leadership is particularly important because school leaders must simultaneously strengthen academic quality and preserve the religious values that define the identity of Islamic education (Rahman, 2025; Romlah et al., 2025).

However, strategic leadership alone is insufficient to improve graduate quality unless it is translated into concrete actions that directly influence teaching and learning (Mandefro et al., 2025; Mu'alimin et al., 2026). Academic supervision provides a strategic mechanism through which school leaders transform institutional vision into instructional practice. Rather than functioning merely as an administrative evaluation or compliance activity, academic supervision represents a continuous process of professional assistance, mentoring, and collaborative reflection designed to strengthen teachers' instructional competence. Through systematic supervision, principals are able to identify instructional challenges, facilitate professional learning, encourage pedagogical innovation, and establish a culture of continuous quality improvement (Meyer et al., 2023; Yang et al., 2025). From this perspective, academic supervision should be understood not simply as an instructional management function but as the practical enactment of strategic leadership aimed at improving instructional quality and, ultimately, graduate outcomes (Nurhasanah & Wasliman, 2026; Sugiar et al., 2024).

Previous studies have widely acknowledged the importance of strategic leadership in enhancing school performance and organizational effectiveness

(Atoum et al., 2024; Safrida et al., 2023). Other studies have demonstrated that academic supervision contributes significantly to teachers' professional development and instructional quality (Mekarsari & Sudana, 2025; Syukri et al., 2023). Meanwhile, research on graduate quality has primarily emphasized curriculum implementation, quality assurance systems, learning outcomes, or institutional resources as the main determinants of educational quality (Abbas et al., 2024; Amaral & Norcini, 2023). Although these studies provide valuable insights, they generally examine strategic leadership, academic supervision, and graduate quality as separate constructs (Aithal & Aithal, 2023; Fumasoli & Hladchenko, 2023). Consequently, limited attention has been given to understanding how strategic leadership is operationalized through academic supervision as an integrated mechanism for improving graduate quality, particularly within the unique organizational and cultural context of *pesantren*-based *madrasah*.

Despite the growing body of literature on strategic leadership, academic supervision, and graduate quality, important gaps remain (Fumasoli & Hladchenko, 2023; Madufo et al., 2024). Existing studies have generally examined these concepts independently, emphasizing either the influence of strategic leadership on organizational performance, the role of academic supervision in improving teacher professionalism, or institutional factors affecting graduate quality. Consequently, limited attention has been given to understanding how strategic leadership is enacted through academic supervision as an integrated leadership practice that directly supports graduate quality improvement (Ahmad & Ahmed, 2023; Širec & Rožman, 2025). Furthermore, empirical evidence from *pesantren*-based *madrasah* remains scarce, despite their distinctive organizational culture, religious values, and educational objectives (Anilon et al., 2026; Mardia et al., 2026). Addressing these gaps is important for developing a more comprehensive understanding of how strategic leadership can be translated into instructional practices that sustainably enhance graduate quality within the unique context of Islamic education.

This study aims to examine how strategic leadership is enacted through academic supervision to improve graduate quality in a *pesantren*-based *madrasah*. Unlike previous studies that have tended to examine strategic leadership and academic supervision as separate constructs (Ahn et al., 2024; Donkoh et al., 2023), this study conceptualizes academic supervision as a strategic leadership practice through which principals translate institutional vision into instructional improvement and graduate outcomes. By integrating these perspectives within the distinctive context of *pesantren*-based *madrasah*, this study contributes to the literature on Islamic educational leadership by offering a contextual model that explains the relationship between strategic

leadership, academic supervision, teacher professional development, and graduate quality. The findings are also expected to provide practical insights for school leaders and policymakers in designing sustainable quality improvement strategies grounded in instructional excellence and institutional values.

2. Method

2.1 Research Design

This study employed a qualitative approach using a field research design to examine how academic supervision was implemented as a strategic leadership practice for improving graduate quality in *pesantren*-based madrasah. A qualitative design was selected because it enables researchers to understand leadership practices, interactions, and organizational processes within their natural setting (Creswell & Creswell, 2023). The researcher acted as the primary research instrument by interacting directly with participants, observing activities, and interpreting findings throughout the research process.

The study was conducted at Madrasah Aliyah Alkhairaat Madinatul Ilmi Dolo, Central Sulawesi, Indonesia. The research site was purposively selected because the *madrasah* has obtained Grade A accreditation and consistently demonstrates high graduate quality, making it an appropriate setting for investigating strategic leadership through academic supervision.

2.2 Population and Participants

The population of this study consisted of educational personnel involved in the implementation of academic supervision at Madrasah Aliyah Alkhairaat Madinatul Ilmi Dolo. Since this research adopted a qualitative approach, participants were selected using purposive sampling based on their roles, experiences, and direct involvement in academic supervision and instructional leadership.

The participants comprised the *madrasah* principal, the vice principal for curriculum affairs, and teachers who had actively participated in the academic supervision process. These participants were considered capable of providing comprehensive information regarding the planning, implementation, monitoring, and evaluation of academic supervision as a strategic leadership practice for improving graduate quality.

2.3 Research Instruments

In qualitative research, the researcher served as the primary instrument responsible for collecting, interpreting, and validating the data (Lim, 2025; Sukmawati, 2023). To support systematic data collection, several research instruments were employed, including observation guidelines, semi-structured interview protocols, and document review checklists.

The observation guideline focused on academic supervision activities, classroom monitoring, and strategic coordination meetings. The interview protocol explored participants' experiences and perceptions regarding strategic leadership, supervision practices, decision-making processes, and challenges encountered during implementation. Documentary evidence included the Annual Work Plan (RKT), academic supervision reports, meeting minutes, and graduate achievement records to strengthen the credibility of the findings through data triangulation.

2.4 Data Collection Procedures

Data were collected through three complementary techniques: participant observation, in-depth interviews, and documentation (Creswell & Creswell, 2023). Participant observation was conducted to examine directly the implementation of academic supervision, leadership practices, and coordination meetings within the *madrasah*. In-depth interviews were carried out with the principal, vice principal for curriculum affairs, and teachers to obtain detailed information regarding strategic leadership practices, supervision implementation, and factors influencing graduate quality.

Document analysis was conducted by reviewing institutional documents, including the Annual Work Plan (RKT), academic supervision reports, curriculum documents, meeting records, and graduate performance data. The combination of these techniques enabled comprehensive understanding and facilitated methodological triangulation to enhance data credibility.

2.5 Data Analysis

Data analysis followed the interactive model proposed by Miles, Huberman, and Saldaña, consisting of three stages: data condensation, data display, and conclusion drawing and verification (Yin, 2018). During data condensation, relevant information obtained from observations, interviews, and documents was selected, organized, and simplified. The condensed data were then systematically displayed to facilitate interpretation and identification of emerging patterns. Finally, conclusions were drawn continuously throughout the analysis and verified by comparing evidence from multiple data sources.

To ensure the trustworthiness of the findings, data credibility was established through methodological triangulation by comparing information obtained from observations, interviews, and documentary evidence (Yin, 2018). This procedure enhanced the consistency and validity of the research findings.

3. Findings

3.1 Strategic Planning of Academic Supervision

The *madrasah* head initiates the academic supervision process through strategic planning aligned with the *madrasah's* vision and targets for graduate quality. Based on interview findings, the enhancement of graduate quality focuses not only on academic achievement but also on the cultivation of religious character in accordance with *pesantren* values. Consequently, graduate competency standards serve as the foundation for developing the academic supervision program.

The results of the observations indicate that the *madrasah* head conducts a mapping of human resources prior to establishing the supervision program. This mapping is used to identify teacher competencies and professional development needs, as well as to determine the priorities for guidance and support to be implemented over the academic year, as decided during the annual work meeting.

The Annual Work Plan (RKT) document indicates that academic supervision is designed as part of the strategy to enhance graduate quality. The supervision program serves not only as a mechanism for evaluating instruction but also as an instrument for teacher capacity building through continuous monitoring, guidance, and evaluation.

3.2 Collaborative Academic Supervision as a Leadership Practice

Research findings indicate that academic supervision at Madrasah Aliyah Alkhairaat Madinatul Ilmi is conducted as a process of professional support rather than as an inspection mechanism. The *madrasah* head employs a clinical supervision approach comprising pre-observation, classroom observation, and post-observation stages. The pre-observation stage focuses on aligning perspectives regarding learning objectives, while the post-observation stage serves as a forum for reflection and providing feedback on the instructional process.

Based on interview findings, the *madrasah* head provides direct feedback following classroom observations. This process involves a reflective discussion focused on identifying instructional strengths, challenges faced by the teacher, and potential improvements for future lessons. This approach fosters a more collaborative supervisory relationship and encourages teachers to engage in continuous instructional improvement.

Observation results also indicate that the *madrasah* head does not implement supervision in a top-down manner. Instead, the supervision process involves senior teachers and division heads through a form of collective leadership. Supervision findings are discussed within an internal learning

community, allowing teachers to share experiences, provide input, and collaboratively devise strategies to improve instruction. This approach strengthens the collaborative culture while simultaneously reducing teacher resistance to change.

Continuous supervision practices foster a more collaborative work climate within the *madrasah* environment. Observational findings indicate that supervision extends beyond mere evaluation; it leads to concrete follow-up actions, such as the provision of instructional media, improvements to the learning environment, and support for teacher-led pedagogical innovations. These conditions create an instructional climate conducive to enhancing the quality of the learning process.

3.3 Strengthening Teacher Professional Capacity through Academic Supervision

Research findings indicate that the continuous implementation of academic supervision contributes to enhancing teachers' professional capacity. Teachers who receive regular supervision demonstrate higher levels of self-efficacy in conducting instruction. Furthermore, they become more confident in selecting instructional strategies, utilizing learning media, and developing innovative teaching methods tailored to the characteristics of their students.

Based on observations and interviews, academic supervision does not stop at classroom observation but continues with an ongoing process of professional guidance. The *madrasah* head monitors the implementation of instruction, provides guidance on classroom management, and evaluates the development of teacher competencies to inform the design of subsequent professional development programs. This process encourages teachers to continuously improve the quality of instruction.

Research findings also indicate that the enhancement of teacher capacity is reflected in improved instructional quality. Supervision outcomes are addressed through the provision of learning resources, improvements to the classroom environment, and support for instructional innovation. These conditions enable teachers to create a more effective, learner-centered learning process.

3.4 Improving Graduate Quality through Strategic Leadership-Based Academic Supervision

Research findings indicate that enhancing the quality of graduates is the primary focus of strategic leadership implemented through academic supervision. The *madrasah* head views supervision not merely as a mechanism for evaluating teachers, but as a strategy to ensure that the entire learning process supports the attainment of graduate competencies. The findings reveal that graduates are expected to possess strong academic competence and

religious character, as well as the competitiveness required to pursue higher education.

Based on interviews and observations, improving the quality of graduates begins with enhancing the quality of the learning process. Teachers who receive continuous supervision demonstrate greater ability in developing innovative instructional strategies. This shift leads to improved student understanding of the learning material and better academic

This study also found that the quality of graduates is understood holistically. Beyond academic achievement, graduates are expected to possess religious character, discipline, a sense of responsibility, and good moral conduct as an embodiment of *pesantren* values. Consequently, academic supervision is directed not only at improving the quality of instruction but also at internalizing Islamic values within every aspect of the learning process.

Research findings indicate that successfully improving the quality of graduates does not depend on sporadic supervision activities, but rather on the implementation of academic supervision conducted continuously as part of the organizational culture. Through consistent monitoring, guidance, evaluation, and follow-up, the *madrasah* principal establishes a quality improvement mechanism capable of maintaining instructional quality while producing graduates who excel in both academics and character.

4. Discussion

4.1 Strategic Planning of Academic Supervision

Academic supervision planning is formulated based on the *madrasah's* long-term vision and targets for graduate quality. Notably, academic supervision is not treated merely as an administrative task but as an institutional strategy to enhance graduate quality (Rodliyah et al., 2024; Wu et al., 2024). It means, supervision planning is influenced by the organizational culture of the *pesantren*. These findings support the concept of strategic leadership, which emphasizes a leader's ability to formulate a vision, anticipate change, and empower human resources to achieve strategic goals (Kessi et al., 2025; Musaigwa, 2023).

Pesantren values serve as the foundation for determining the direction of teacher development and graduate quality, thereby reinforcing the concept of value-based leadership, which positions organizational values as the basis for strategic decision-making. This implies that leadership is oriented not only toward academic achievement but also toward the cultivation of religious character. Baharun asserts that graduate quality is the outcome of effective instructional leadership (Yakin et al., 2025; Yanto & Hamzah, 2026). Thus, this research not only underscores the importance of instructional leadership but

also demonstrates how strategic leadership is translated into academic supervision planning within *pesantren*-based *madrasahs*.

Unlike previous studies that primarily positioned academic supervision as an instructional improvement mechanism (Barokah et al., 2025; He et al., 2024), this study demonstrates that within *madrasah*, academic supervision begins with strategic planning that aligns institutional vision, religious values, and graduate quality targets. This finding extends the application of strategic leadership theory by highlighting the integration of value-based planning into academic supervision.

4.2 Collaborative Academic Supervision as a Leadership Practice

Academic supervision has shifted from a purely evaluative function to one of professional mentoring. This shift aligns with the concept of instructional leadership, which positions the *madrasah* head as a leader focused on enhancing teaching quality rather than merely conducting administrative assessments (Ayumi & Nasution, 2025). Consequently, supervision serves as a vehicle for teachers' professional development through continuous reflection and the improvement of instructional practices.

A collaborative supervision approach reflects the characteristics of coaching within educational leadership. The *madrasah* head acts as a facilitator helping teachers overcome instructional challenges, rather than as an evaluator seeking faults. In *madrasah*, this approach is reinforced by values of kinship and spirituality, fostering open, trusting relationships that support teachers' professional growth.

Research indicates that academic supervision is not solely the responsibility of the *madrasah* head but also involves senior teachers and division heads through internal learning communities. These findings support the concept of distributed leadership, which emphasizes sharing leadership roles among competent organizational members. This approach expands opportunities for collaborative teacher learning while strengthening the improvement of instructional quality.

Collaborative supervision also contributes to creating a conducive learning climate (Bakokonyane & Pansiri, 2024). Follow-up actions include providing instructional media, improving the classroom environment, and supporting pedagogical innovation. In other words, the concept of a positive school climate identifies a positive learning environment as a crucial factor in enhancing student learning outcomes.

Academic supervision in *madrasah* is developed through the integration of collaborative approaches and religious values. Spiritual values not only strengthen the relationship between the *madrasah* head and teachers but also

build a shared commitment to improving the quality of instruction. These findings broaden the application of instructional leadership within the context of Islamic education.

4.3 Strengthening Teacher Professional Capacity through Academic Supervision

Collaborative academic supervision contributes to enhancing teachers' professional capacity. This underscores that supervision serves not merely as an evaluation mechanism but also as a means to develop pedagogical competence (Arifin et al., 2023). Through continuous observation, reflection, and feedback, teachers gain opportunities to refine their instructional strategies, thereby improving the quality of the teaching and learning process.

Academic supervision also encourages teachers to adopt innovative approaches when designing instruction. Post-observation feedback helps teachers reflect on their teaching practices and develop strategies that better align with students' needs (Heron et al., 2024). Consequently, teacher professionalism is reflected not only in subject matter mastery but also in the ability to continuously adapt teaching methods.

Enhancing teachers' professional capacity occurs not only through individual supervision but also through internal learning communities. Discussing supervision results with senior teachers and department heads creates a space for sharing experiences, addressing instructional challenges, and collaboratively formulating solutions. This fosters a culture of professional learning within the *madrasah* environment.

Furthermore, teacher capacity building takes place through a continuous cycle of guidance, ranging from monitoring instruction and providing direction to evaluating teacher competence. These findings demonstrate that academic supervision is positioned as an ongoing professional development process rather than merely an occasional evaluative activity.

4.4 Improving Graduate Quality through Strategic Leadership-Based Academic Supervision

Improving the quality of graduates is the result of strategic leadership realized through continuous academic supervision. Munna states that instructional leadership positions the enhancement of learning quality as the primary pathway to improving student achievement. (Kemethofer et al., 2025; Munna, 2023). The *madrasah* head not only oversees the learning process but also ensures that all supervisory activities are directed toward achieving established graduate competencies.

Furthermore, a holistic understanding of graduate quality is reflected in academic achievement, religious character, responsibility, discipline, and good

moral conduct. These findings align with global educational trends that position holistic student outcomes as key indicators of educational success. This orientation is realized through the integration of Islamic values across the entire learning process. (Alam & Mohanty, 2023; Bhardwaj et al., 2025).

Successfully improving the quality of graduates depends not only on the periodic implementation of supervision but also on the *madrasah* principal's ability to cultivate a supervision culture as an integral part of the organization's quality culture (Mu'alimin et al., 2026). Consistent supervision establishes a mechanism for continuous quality improvement (Zhang & Wang, 2026). Unlike most studies conducted in general schools, this study reveals that the improvement of graduate quality is driven by the integration of strategic leadership, academic supervision, and *pesantren* values. The *madrasah* principal's moral authority reinforces the supervision process, motivating teachers not only to enhance the quality of instruction but also to commit to instilling religious values in their students.

5. Conclusion

This study concludes that strategic leadership implemented through academic supervision provides a sustainable mechanism for improving graduate quality in *pesantren*-based *madrasah*. By integrating strategic planning, collaborative supervision, and continuous professional development, the principal strengthens teachers' instructional capacity, improves the quality of learning, and supports the development of graduates with strong academic competence and Islamic character.

This study contributes to the strategic leadership literature by demonstrating that the effectiveness of academic supervision depends not only on managerial practices but also on the integration of value-based leadership within the cultural context of *pesantren*. The proposed model highlights how strategic leadership, collaborative supervision, and Islamic values operate as complementary elements in creating sustainable educational quality improvement. This contextual model may serve as a practical reference for leaders of Islamic educational institutions seeking to improve graduate quality while preserving their institutional identity.

Declaration of AI and AI-Assisted Technologies

In this study, author uses the help of ChatGPT as an artificial intelligence tool to improve language clarity, and identify relevant academic references. However, the author carefully reviews and re-edits all the generated content as needed and takes full responsibility for the final content of the publication. This

use of AI does not replace the critical judgment, interpretation, or scientific contributions of the authors.

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