
School principals' instructional supervision strategies for enhancing teachers' capacity for self-renewal

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Abstract

Education demands continuous teaching and self-renewal to maintain instructional relevance amid evolving demands. This qualitative study examines the instructional supervision strategies employed by the principal at SD Pelita Fajar Elementary School to enhance teachers' capacity for self-renewal. Data were gathered through observation, interviews, and document analysis, and analyzed via NVivo 14 following Miles, Huberman, and Saldaña's interactive model. Findings indicate that the principal implements collaborative, evidence-based strategies across planning, implementation, follow-up, and evaluation phases, anchored in instructional leadership. These foster a structured self-renewal cycle—exploration (diverse knowledge sourcing), exploitation (innovative media creation), absorption (skill internalization), and integration (collaborative embedding)—while addressing barriers like time constraints and low motivation through targeted solutions. The approach significantly enhances teachers' adaptability, problem-solving skills, and professional growth, underscoring the crucial role of supervision in sustainable development.

Keywords

Collaborative strategies, instructional supervision, principal strategies, self-renewal capacity, teacher professional development

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Introduction

Education in the twenty-first century is characterized by rapid policy change, digital transformation, and increasingly complex expectations regarding student outcomes. These dynamics require teachers to do more than maintain their existing competencies; they must continually update their knowledge, skills, and professional identity to provide relevant, high-quality learning experiences (Sahirah et al., 2025). In this context, teachers' capacity for self-renewal—defined as their sustained ability to explore new ideas, experiment with innovative practices, internalize new learning, and integrate it into daily teaching—has become a critical dimension of school quality and effectiveness (Busnawir et al., 2025). When teachers can renew themselves professionally, schools are better positioned to respond adaptively to curricular reforms, technological developments, and diverse learner needs (Ajani, 2024).

The development of teachers' self-renewal capacity is not an isolated event. A substantial body of research on successful school leadership highlights the principal's central role as an instructional leader who shapes the conditions under which teachers learn and grow (Sutami & Wijayanti, 2025). Instructional leadership is expressed not only through vision and policy but also through concrete practices such as classroom observation, professional dialogue, coaching, and the strategic organization of professional learning opportunities. Consequently, instructional supervision has shifted conceptually from a bureaucratic mechanism for control and evaluation toward a collaborative, formative process aimed at strengthening teacher learning, reflection, and innovation. In this more developmental paradigm, supervision becomes a key mechanism through which principals can cultivate teachers' responsibility for self-improvement and their ability to solve instructional problems in their classrooms.

In Indonesia, regulatory frameworks and national standards have increasingly demonstrated the value of effective instructional leadership and supervision. Principal Performance Evaluation (Penilaian Kinerja Kepala Sekolah/PKKS) indicators, as well as teacher competency standards, explicitly require principals to guide, monitor, and systematically facilitate teacher professional development. However, empirical evidence suggests that many school leaders continue to struggle with transitioning beyond administrative routines and compliance-oriented supervision to more substantive, learning-centered approaches that genuinely foster teacher growth and development. The introduction of various in-service training programs has not been sufficiently documented in terms of how principals translate these expectations into coherent supervision strategies that foster teacher self-renewal at the school level, particularly in primary schools.

At the same time, the nature of teacher teaching itself is evolving. Teachers are increasingly exposed to diverse knowledge sources, ranging from formal professional development activities—such as seminars, workshops, and teacher working groups—to digital platforms, including educational websites, online videos, and social media. While these resources offer ample opportunities for exploration, they may not always lead to enhanced classroom practices. Teachers must be able to apply newly acquired knowledge creatively in their teaching, absorb it by internalizing new skills and understandings, and ultimately integrate it into stable professional routines that are supported by collegial collaboration and feedback. In other words, self-renewal can be conceptualized as a multi-stage process encompassing

exploration, exploitation, absorption, and integration. Understanding how school-level supervision can intentionally support each of these stages is, therefore, a crucial concern both theoretically and practically.

Despite the growing recognition of these issues, there is still limited qualitative research that examines in detail how a principal's instructional supervision strategies are designed and enacted as a coherent cycle—spanning planning, implementation, follow-up, and evaluation—and how this cycle interacts with teachers' internal self-renewal processes. Much of the existing literature on instructional leadership in Indonesia emphasizes general leadership characteristics or describes supervision in broad terms without systematically mapping the microprocesses through which it stimulates ongoing teacher learning and innovation. Furthermore, relatively few studies employ qualitative analysis software to visualize the complex relationships among leadership practices, supervision activities, teacher learning behaviors, and contextual factors within a single school case.

Addressing this gap, the present study focuses on SD Pelita Fajar. This elementary school has consistently demonstrated strength in instructional management, as evidenced by positive PKKS results and well-documented supervision reports. Initial observations indicated that the principal of this school has established a relatively organized and cooperative supervision system that includes planning based on various data sources, joint implementation with both internal and external supervisors, systematic follow-up actions, and evaluation through coaching. At the same time, teachers at SD Pelita Fajar appeared to exhibit noticeable levels of initiative in seeking new knowledge, experimenting with innovative learning media, and refining their instructional strategies—behaviors indicative of a strong capacity for self-renewal. These characteristics made SD Pelita Fajar an appropriate and compelling site for an in-depth qualitative investigation.

This study, therefore, aims to describe the principal's instructional supervision strategies comprehensively and to analyze how these strategies foster teachers' capacity for self-renewal. More specifically, the research explores (1) how the principal plans, implements, follows up, and evaluates instructional supervision in a collaborative and evidence-based manner; (2) how teachers manifest self-renewal through the interconnected processes of exploration, exploitation, absorption, and integration in their professional practice; and (3) what contextual factors support or inhibit these processes and how the principal responds to such challenges. By adopting a descriptive, qualitative design and employing NVivo 14 to manage and visualize data from observations, interviews, and documents, the study aims to provide a transparent and rigorous account of the dynamic interplay among leadership, supervision, and teacher learning within a real school context.

The contribution of this research is twofold. Conceptually, it elaborates a model of teacher self-renewal capacity grounded in empirical data from a primary school and explicitly linked to the principal's instructional supervision cycle. This model enriches the discourse on professional development by illuminating how leadership-driven supervision can be translated into teachers' internal learning trajectories, thereby bridging the gap between organizational practices and individual growth. The study provides practical guidance for principals, supervisors, and policymakers on creating supervision systems that are not only evaluative but also genuinely developmental. These systems should emphasize coaching, a collaborative culture, data-informed planning, and strategic responses to contextual challenges such as time

limitations and fluctuations in teacher motivation, as well as integration (collaborative embedding), while effectively addressing obstacles like time constraints and low motivation through targeted solutions. The approach significantly enhances teachers' adaptability, problem-solving skills, and professional growth, underscoring the crucial role of supervision in sustainable development.

Methodology

Research design

This study employed a descriptive qualitative research design, chosen for its capacity to explore the instructional supervision strategies implemented by the principal of SD Pelita Fajar in fostering teachers' self-renewal capacity. Qualitative research is suitable in this context, as it enables an in-depth understanding of complex human behaviors and interactions that quantitative methods may not fully capture (Creswell & Poth, 2018; Sugiyono, 2021). The descriptive approach ensures a detailed account of the phenomena perceptions involved in instructional supervision.

Participants and research site

The participants in this study include the school principal, the supervisory team, and four teachers selected from SD Pelita Fajar. Purposive sampling was employed to select participants who were directly involved in the phenomenon under investigation, thereby ensuring that the chosen individuals could provide substantial and pertinent insights (Etikan et al., 2016).

The study took place at SD Pelita Fajar in Indonesia, which was chosen because it is known for having effective instructional management and a supervision system led by the principal. The school has demonstrated success in fostering professional growth among teachers, making it an appropriate site for studying instructional supervision practices.

Data collection techniques

To ensure triangulation and enhance the validity of the findings, data were collected using three complementary techniques.

- **Observation:** Classroom supervision sessions and feedback meetings were watched to capture direct interactions between the principal and teachers. The goal was to observe the collaborative nature of the supervision process and its impact on teacher self-renewal.
- **Semi-structured interviews** were conducted with key informants, including the principal, supervisory team, and teachers, to investigate their experiences and perceptions of the implemented instructional supervision strategies.
- **Document Analysis:** Supervision reports, evaluation forms, and other school records were reviewed to provide supplementary evidence of the supervision process and its outcomes.

This multi-method approach enhances the reliability of the data by verifying information from different sources against one another (Patton, 2015).

Data analysis procedures

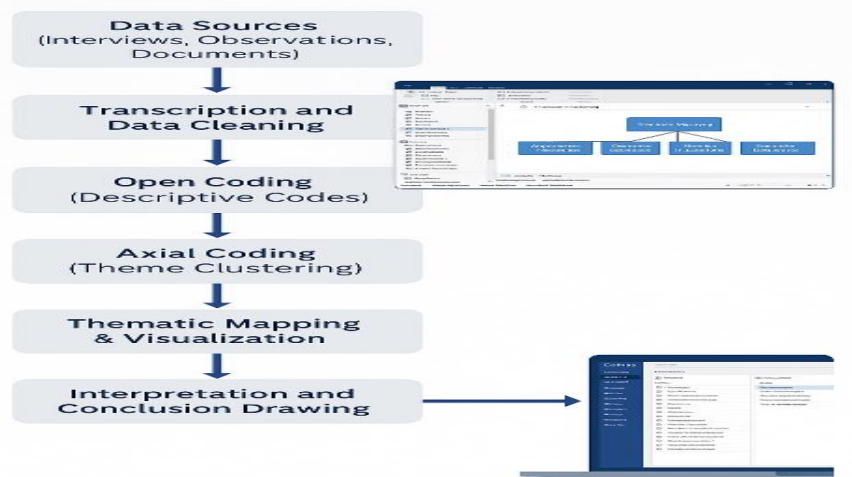
Data were analyzed using the interactive model by Miles et al. (2014), which consists of three concurrent processes:

- Data Reduction: Raw data from interviews, observations, and documents were condensed, coded, and categorized to identify key themes related to instructional supervision and teacher self-renewal.
- Data Display: The coded data were organized into visual formats, such as matrices, cluster maps, and thematic charts, to facilitate the identification of patterns and relationships within the data.
- Conclusion Drawing and Verification: The identified themes were interpreted, verified, and used to draw conclusions aligned with the research objectives. The iterative process of data analysis allowed for continuous refinement of insights.
- To assist in managing large volumes of qualitative data, NVivo 14 software was used for systematic coding, thematic mapping, and visualization. NVivo facilitated the identification of emerging themes, such as collaborative supervision, reflective practices, teacher innovation, and professional self-renewal, by organizing and visualizing co-occurring patterns within the data.

NVivo analytical workflow

Figure 1 below illustrates the NVivo 14 qualitative data analysis workflow used in this study to process the qualitative data.

Figure 1. *NVivo 14 qualitative data analysis workflow*



The NVivo 14 analysis procedure begins with the data collection phase, which involves gathering data through interviews, observations, and document analysis. The collected data are carefully transcribed and cleaned to ensure accuracy and consistency. Once the data are ready, they are imported into the NVivo 14 software, where the analysis process begins.

Open coding

The first step in the analysis process is open coding. During this phase, the raw data are systematically examined to identify initial descriptive categories that emerge from the text. These categories serve as the basis for additional analysis and encapsulate the principal themes concerning instructional supervision and teachers' capacity for self-renewal.

Axial coding

After the initial coding, axial coding is performed to group related codes together and identify patterns, similarities, and relationships between the categories. This stage is critical for refining the themes and organizing them into more meaningful clusters that reflect the central concepts and processes within the data.

Thematic mapping and visualization

Once the themes are refined, thematic mapping is conducted using NVivo's built-in tools, such as node relationships and concept maps. These tools are used to visualize the interconnections between different codes and categories. The visual representations help identify dominant patterns and relationships within the data, allowing for a clearer understanding of how the themes are interrelated.

Interpretation and conclusion drawing

In the final phase, interpretation and drawing of conclusions, all identified themes are synthesized to provide broader conceptual insights that align with the study's objectives. This step involves compiling the data and drawing valid conclusions about how instructional supervision impacts teachers' ability to renew themselves. The iterative analysis process ensures that the findings are rigorously supported by the data, thereby enhancing the credibility and reliability of the results.

The NVivo-assisted workflow improves the transparency and traceability of the analysis through its structured coding and visual representations of thematic relationships. By using both qualitative coding and thematic mapping, NVivo facilitates a rigorous and transparent approach to data analysis, ensuring that the study's findings are grounded in the data and aligned with the research objectives.

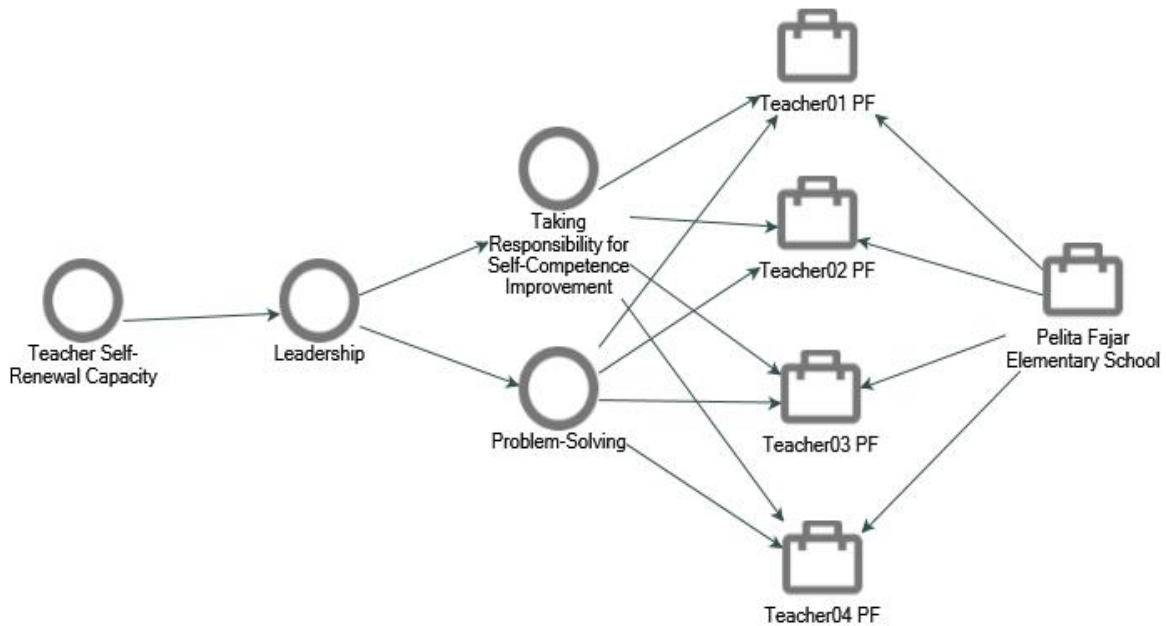
Findings

The findings presented in this section are based on qualitative data collected through observation, semi-structured interviews, and document analysis. The data reveal that the principal's instructional supervision strategies play a pivotal role in fostering teachers' self-renewal capacity. The implemented strategies were collaborative and systematic, positively influencing teachers' ability to adapt and grow professionally. The findings are organized thematically, focusing on key areas: leadership's role in fostering competence, the structured supervisory cycle, teachers' internal self-renewal processes (through exploration, exploitation, absorption, and integration), and the contextual factors that support or hinder the effectiveness of these processes.

Leadership as the foundational driver of teacher self-renewal capacity

The analysis reveals that leadership is the central force driving the teachers' self-renewal capacity and professional growth at SD Pelita Fajar. Figure 2 illustrates the connection between leadership, institutional expectations, teacher duties, and individual learning behaviors.

Figure 2. *Leadership as the foundational driver of teacher self-renewal capacity.*



The visual representation in Figure 2 highlights that leadership is not an isolated construct; it operates as a central node influencing two primary domains: (1) Taking Responsibility for Self-Competence Improvement and (2) Problem-Solving Practices.

Encouraging self-competence improvement

At SD Pelita Fajar, leadership serves as a catalyst that empowers teachers to take charge of their own professional development. Teachers are motivated to engage in self-directed learning, set improvement goals, and respond proactively to feedback. The leadership practices—including guidance, encouragement, and fostering professional trust—create an environment that triggers teachers' intrinsic motivation for self-improvement.

Enhancing problem-solving practices

Another significant influence of leadership is its role in shaping teachers' problem-solving abilities. Effective leadership fosters a culture that empowers teachers to identify challenges, explore potential solutions, and enhance their instructional practices. Teachers' problem-solving skills are shaped not only by individual efforts but also through leadership that provides direction, mentoring, and opportunities for collaborative reflection and growth.

These leadership-driven practices are consistently observed among all teachers, indicating that the school's leadership is systemic and deeply ingrained within its organizational culture. The role of leadership in initiating and sustaining the cycles of supervision and teacher self-renewal is therefore central to fostering continuous professional growth.

Planning and implementation strategies in instructional supervision

The planning strategy phase, as shown in Figure 3, demonstrates how the principal employs a data-driven, multilayered approach to design adequate supervision. Various data sources, including teacher performance evaluations, parent feedback, and school reports, offer comprehensive details about this process. It ensures that the supervision process is not based on assumptions but on solid, evidence-based decisions, promoting fairness and relevance.

Figure 3. *Planning strategy in the principal's instructional supervision cycle*

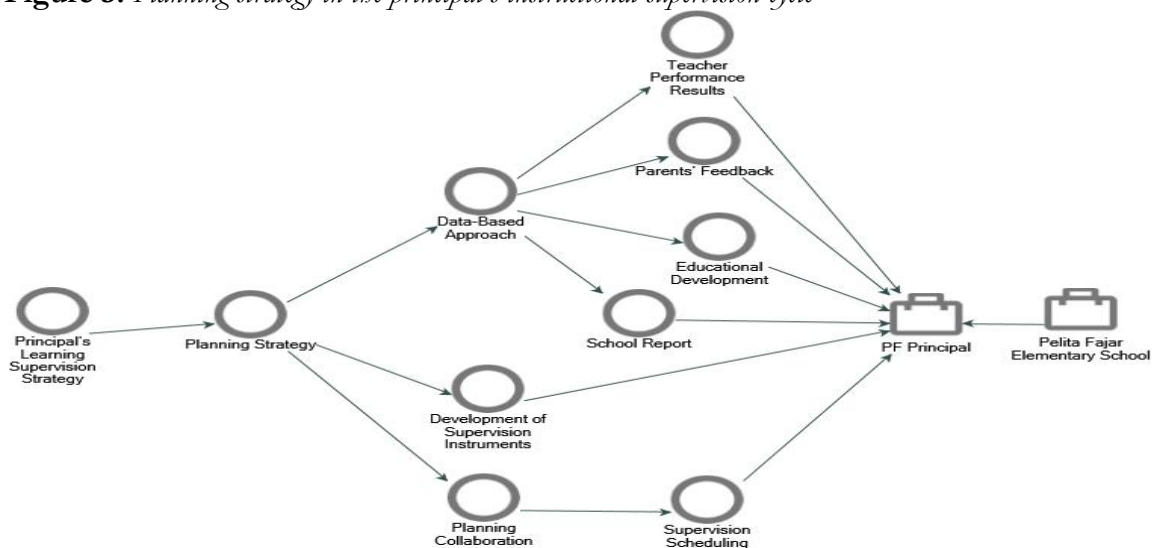


Figure 3 illustrates the planning phase as a comprehensive, data-driven process. The diagram illustrates how the principal integrates various inputs, including teacher performance results, parent feedback, and school development indicators, into a structured supervision plan. The planning is collaborative, ensuring alignment with the school's overall goals and fostering shared ownership of the supervision process.

Data-driven planning, the principal tailors the supervision plan to address actual needs by relying on data, including feedback from teachers and other stakeholders. This diagnostic approach strengthens the relevance of the supervision strategies.

Development of supervision tools, the principal customizes supervision instruments such as rubrics, checklists, and observation sheets to meet the specific needs of the school. This level of adaptation underscores the personalized nature of the supervision strategy, ensuring that tools are directly applicable to the local context.

Collaborative planning, collaboration plays a crucial role in the planning stage, with the principal actively involving teachers and supervisory teams in co-constructing the supervision agenda. This collective approach helps align expectations, clarify roles, and ensure that teachers are engaged in the process.

The Implementation Strategy, as depicted in Figure 4, shows how these plans are operationalized. The principal employs a combination of best practices, direct observation, and collaborative methods to support teachers. These strategies ensure that supervision is not only a top-down approach but also one that encourages shared responsibility.

Figure 4. Implementation strategy in the principal's instructional supervision cycle

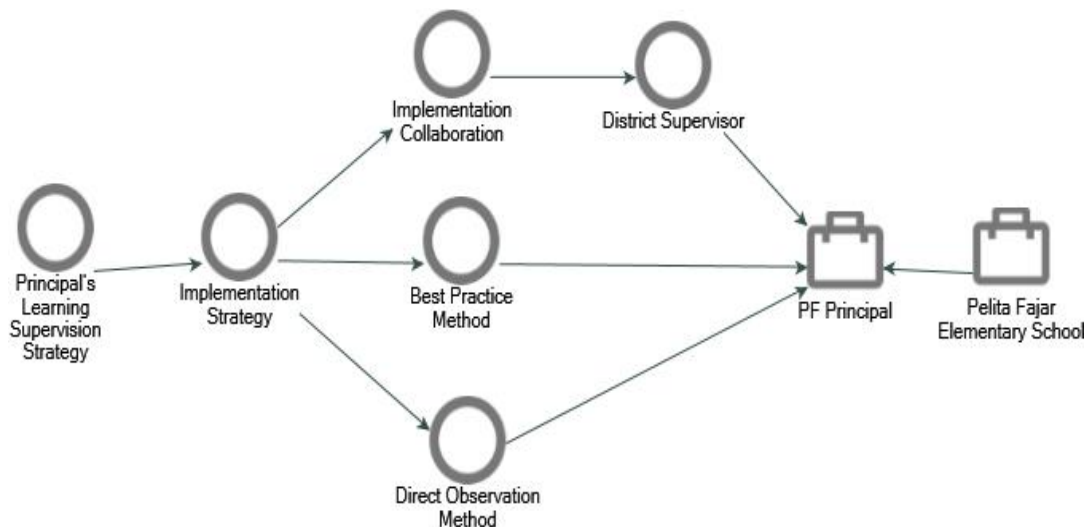


Figure 4 outlines the implementation phase, where the principal's planned strategies are put into action. The visual illustrates how the principal employs best practice methods, conducts direct classroom observations, and collaborates with the district supervisor to ensure adequate supervision.

Follow-up and evaluation strategies for sustaining professional growth

The follow-up strategy, illustrated in Figure 5, focuses on sustaining teacher development after the initial supervision process has been completed. This phase involves a priority scale approach to address the most pressing professional development needs based on observations. It ensures that resources and interventions are aligned with teachers' most critical development areas.

Figure 5. *Follow-up strategy for sustaining teacher professional development*

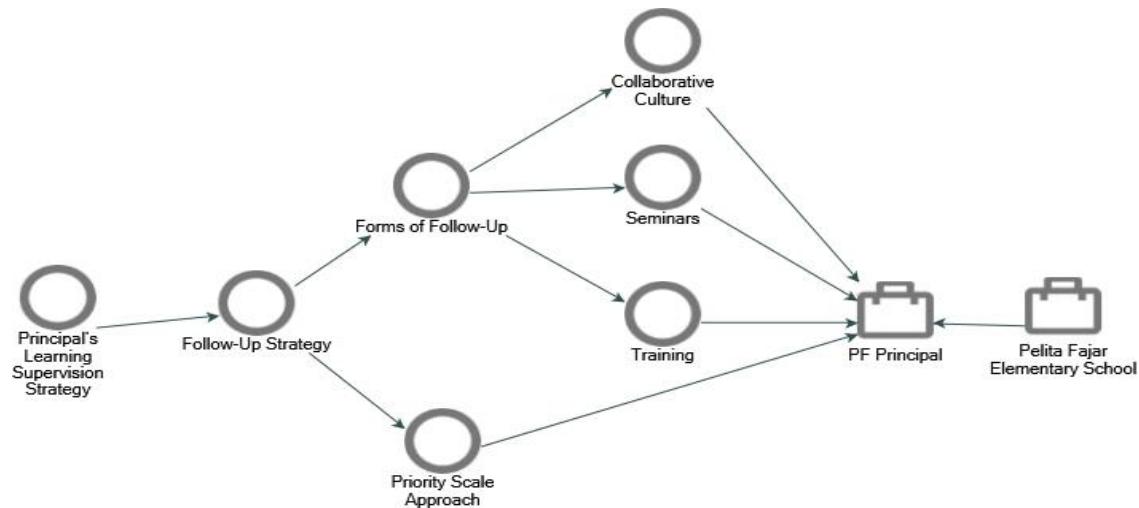


Figure 5 highlights the follow-up phase, showing how the principal applies an evidence-based approach to prioritize teacher development needs. The diagram also illustrates how structured professional development activities, such as seminars and training, are complemented by the creation of a collaborative culture to reinforce self-renewal.

Structured development and cultural reinforcement, follow-up actions include formal interventions, such as seminars and training, to address skill gaps identified during supervision. Initiatives to reinforce a collaborative culture within the school complement these efforts, fostering peer-to-peer learning and ongoing professional development through reflection and ongoing professional development.

Feedback and coaching in evaluation, the Evaluation Strategy (Figure 6) emphasizes the centrality of coaching in providing constructive feedback. This strategy shifts away from traditional judgmental supervision and focuses on fostering reflective dialogue between the principal and teachers. Coaching promotes sustained self-reflection, helping teachers internalize feedback and integrate it into their practice. Peer assessment further strengthens this process, enabling teachers to engage in collaborative evaluation, which enhances both personal growth and institutional trust.

Figure 6. Evaluation strategy and the centrality of coaching

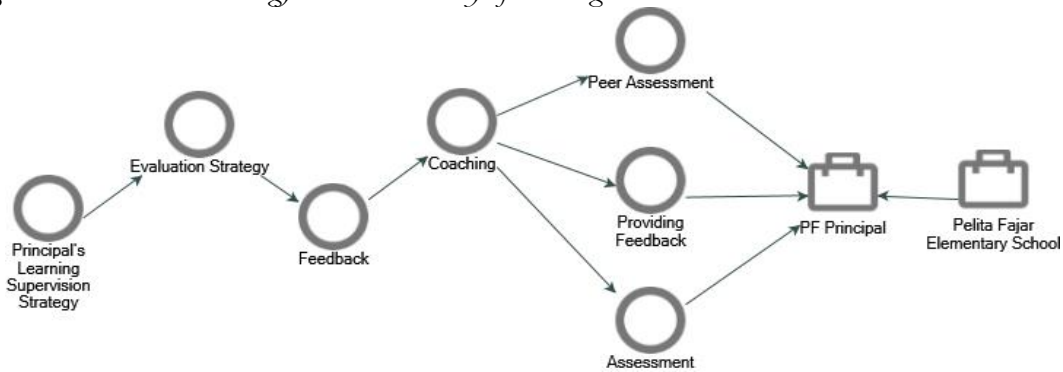


Figure 6 illustrates the evaluation phase, where coaching serves as the key mechanism for transferring feedback into actionable outcomes. It shows how feedback, assessment, and peer evaluation are integrated to create a comprehensive and balanced approach to teacher development.

Teachers' self-renewal process: The E-E-A-I cycle

The study identifies a clear pattern in teachers' self-renewal process, encapsulated in the E-E-A-I Cycle (Exploration, Exploitation, Absorption, Integration). This process reflects the stages through which teachers engage with new knowledge and practices:

Exploration (Figure 7), teachers actively seek new knowledge through various sources, including seminars, training sessions, and digital platforms such as YouTube and social media. This indicates a high level of adaptability, as teachers embrace both traditional and modern forms of professional learning.

Figure 7. Exploration phase: diverse knowledge sourcing for teacher self-renewal

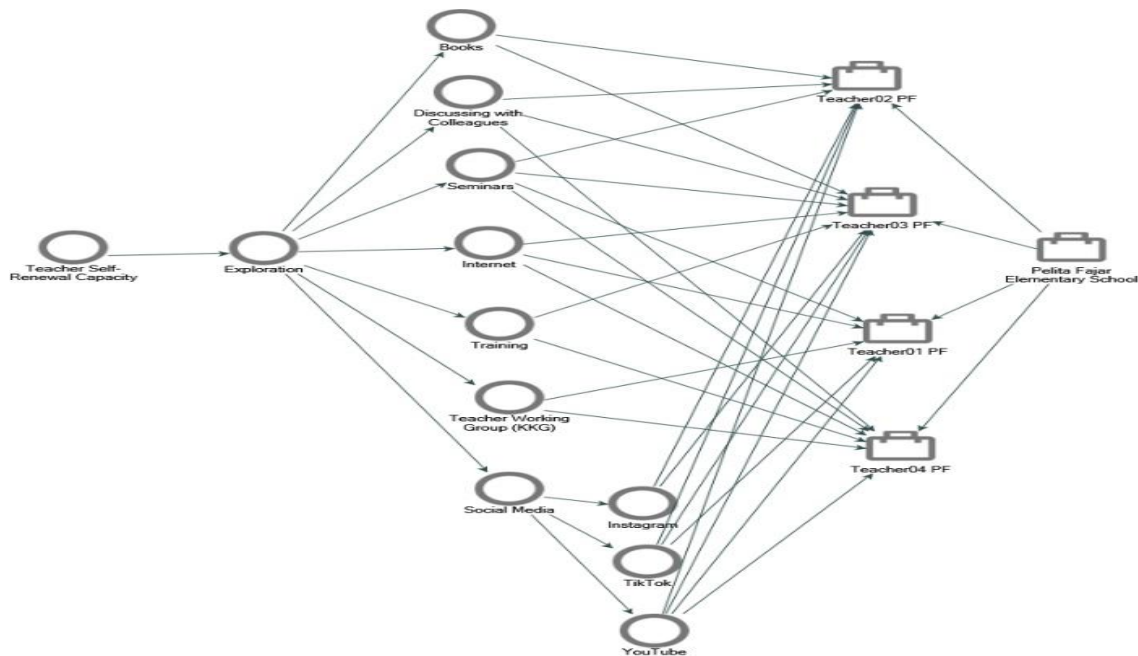
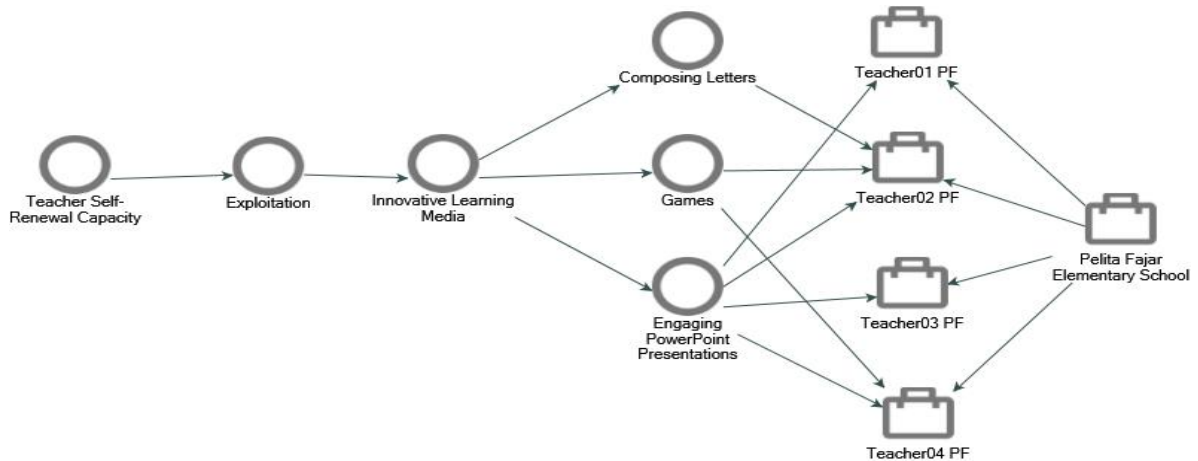


Figure 7 shows the diverse resources teachers utilize during the exploration phase. These resources include traditional methods, such as seminars and training, as well as digital platforms, which provide flexibility and ease of access to new information.

Exploitation (Figure 8), teachers translate acquired knowledge into innovative teaching practices, such as creating new learning materials or developing instructional strategies. This phase demonstrates a shift from theory to practice, as teachers apply what they have learned in real classroom settings.

Figure 8. *Exploitation phase: practical application and innovative media creation*



In Figure 8, teachers engage in the exploitation phase by developing innovative learning tools, such as educational games, PowerPoint presentations, and other classroom materials. This phase is a key step in applying new knowledge to improve teaching practice.

Absorption (Figure 9), teachers internalize and refine new skills through self-learning and skill improvement. They focus on specific aspects of their teaching practice, such as enhancing teaching methods and strategies. This phase represents the deepening of teachers' pedagogical expertise.

Figure 9. *Absorption phase: internalization of skills and knowledge*

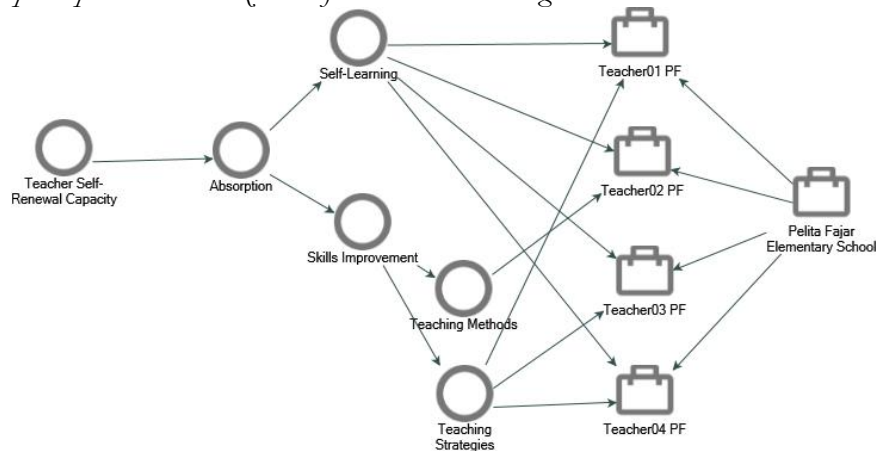


Figure 9 highlights the absorption phase, where teachers refine their teaching methods and strategies, demonstrating the internalization of the new knowledge gained during the previous phases.

Integration (Figure 10), finally, the new practices are institutionalized through collaborative reflection and feedback. Teachers work together to share, critique, and embed new practices into their professional routines, ensuring that self-renewal is not just individual but collective.

Figure 10. *Integration phase: institutionalizing new practices through collaboration and feedback*

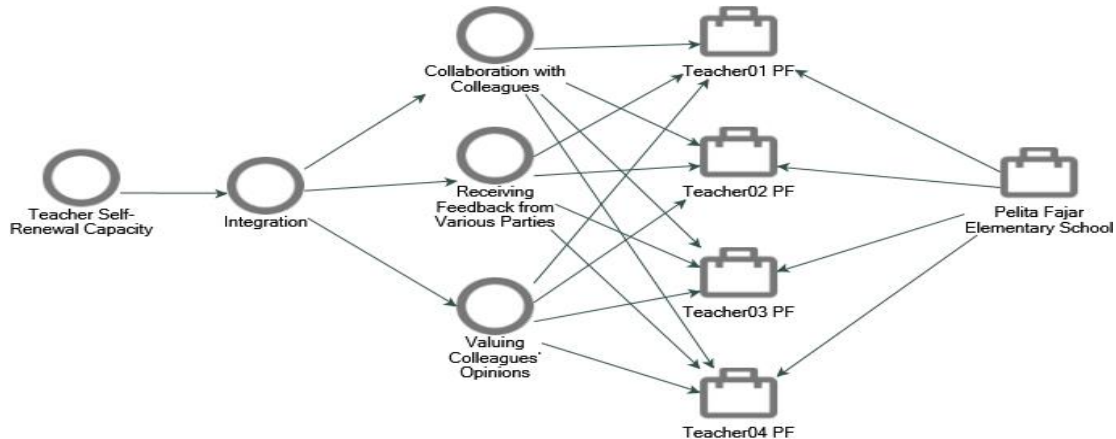


Figure 10 illustrates the integration phase, where new practices are solidified through ongoing collaboration and feedback, ensuring that teachers adopt and institutionalize them as part of their professional identity.

Contextual factors: Supporting and inhibiting factors

The study also highlights the contextual factors that influence the success of the instructional supervision process. These factors, shown in Figure 11, include both supporting and inhibiting barriers.

Figure 11. *Contextual factors: supporting factors and inhibiting barriers*

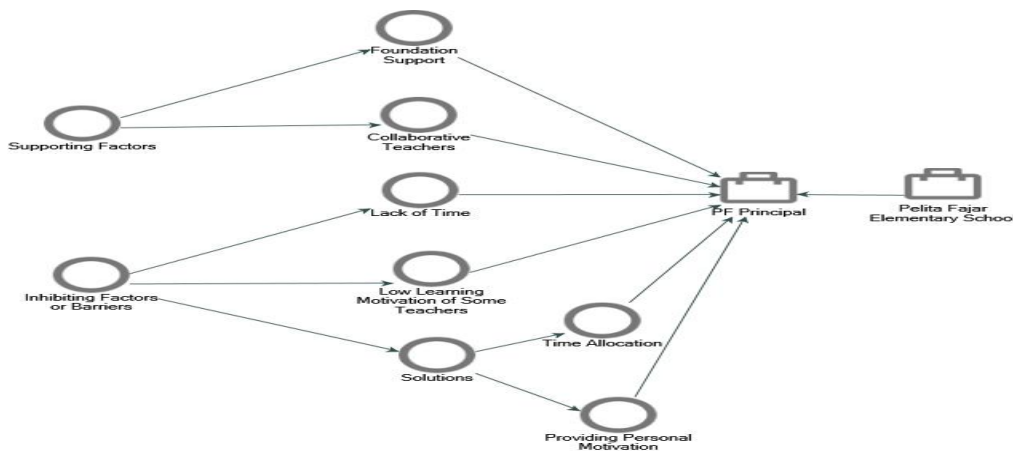


Figure 11 outlines the supporting factors, such as institutional resources and a collaborative culture, as well as the inhibiting barriers, including a lack of time and low learning motivation. The diagram also illustrates the solutions implemented by the principal to address these challenges, ensuring sustained teacher development

Discussion

This study aimed to investigate how the principal's instructional supervision strategies at SD Pelita Fajar enhance teachers' self-renewal capacity, conceptualized as a multi-stage process of exploration, exploitation, absorption, and integration. The findings—particularly the structured supervision cycle aligned with teacher empowerment and the observed E-E-A-I self-renewal trajectory—contribute to ongoing debates about the role of school leadership in professional development and teacher learning in the 21st century. In the discussion that follows, the researchers relate the findings to recent empirical and conceptual literature, draw implications, and reflect on the limitations and future directions.

Instructional supervision as instructional leadership

The principal's leadership is not only foundational in motivating teachers to pursue self-improvement but also central to creating a vision of teaching excellence that aligns with the broader school goals. The literature suggests that instructional leaders play a crucial role in creating a supportive environment where teachers feel both challenged and supported in their professional development (Leithwood et al., 2020). This study supports this perspective, as the principal at SD Pelita Fajar employed an instructional leadership model that went beyond administrative duties to shape the pedagogical practices in the school actively. This approach enables teachers to see leadership as an ongoing resource, rather than a distant authority, which significantly influences their willingness to engage in the professional development process. Therefore, leadership that fosters trust, support, and open communication between administrators and teachers is key to promoting self-renewal in teaching.

Moreover, the principal's engagement with data-driven decision-making in supervision ensures that teachers' development is continuously aligned with the school's performance needs. Data-based planning, as demonstrated in the findings, enhances the transparency and objectivity of supervision, enabling teachers to clearly identify areas for improvement and understand how to address them effectively. This evidence-based model is particularly important in education systems where accountability is crucial, ensuring that professional development efforts are not only practical but also measurable (Beerkens, 2020; Bush & Glover, 2021; King, 2014). By relying on data to guide decisions, the principal at SD Pelita Fajar demonstrates a sophisticated understanding of how instructional leadership can be both strategic and adaptive, ensuring that all supervision activities have a direct impact on teacher growth and development.

Collaborative culture and teacher self-renewal

Collaboration in the supervision process is not just about providing support but also about building a professional community where teachers feel a sense of ownership over their

development. The collaborative culture nurtured at SD Pelita Fajar is indicative of the shift in educational leadership towards a more collective approach to teacher professional development. This finding is consistent with [Sergiovanni's \(2015\)](#) view that leadership should be seen as a shared endeavor, where teachers are not just recipients of feedback but active participants in their learning process. By involving teachers in collaborative decision-making, the principal ensures that the supervision process is not top-down but a more horizontal model where teachers feel respected and empowered.

Furthermore, collaboration serves to address individual learning needs within a group context. The presence of peer feedback and shared learning spaces enables teachers to benefit from the diverse experiences and insights of their colleagues. This creates an environment where professional development is not limited to individual efforts but is seen as a collective pursuit. Research suggests that when teachers work together to solve problems and share knowledge, they are more likely to experience long-term growth and innovation in their practice ([Sergiovanni, 2015](#); [Skrbinjek et al., 2024](#)). Thus, the emphasis on collaboration in the supervisory process at SD Pelita Fajar provides a model for schools seeking to build a sustainable professional learning community that fosters continuous teacher improvement.

The E-E-A-I cycle: A framework for teacher self-renewal

The four-phase cycle of self-renewal, comprising exploration, exploitation, absorption, and integration, provides a dynamic and holistic perspective on professional development. Exploration is not just about acquiring knowledge but about actively seeking new teaching methods and practices that can be implemented in the classroom. The integration of modern digital platforms into the learning process indicates that teachers are acknowledging the evolving nature of pedagogy, where traditional face-to-face learning is being increasingly supplemented by digital tools ([Bush & Glover, 2021](#)). This trend is significant because it reflects the current shift toward a more globalized and technology-driven educational landscape, where teachers must continually adapt to new resources and innovations to remain relevant and practical.

In the exploitation phase, the creation of learning media such as games and PowerPoint presentations represents a tangible application of knowledge. This stage is crucial because it demonstrates how theoretical learning is translated into practical teaching tools that directly benefit students. This transformation of knowledge into classroom practices is vital for the ongoing development of teaching, as it ensures that teachers are not just passive consumers of information but active creators of learning experiences. By incorporating new practices into their teaching, teachers can provide more engaging and relevant lessons, thereby enhancing student learning outcomes. The cycle of knowledge application and innovation during the exploitation phase is a critical component of fostering self-renewal among teachers.

Moreover, the absorption and integration phases are crucial for ensuring that the knowledge and skills acquired are not only internalized but also consistently applied. These phases emphasize that self-renewal is an ongoing process, rather than a one-time event. The gradual internalization of new skills and practices, coupled with their integration into daily teaching routines, ensures that teachers are not merely adopting new knowledge for short-term gain but are embedding it into their long-term professional identities. This transformation

is essential for sustained improvement and reflects the shift from external professional development initiatives to an individualized, internally driven process of evaluation.

Contextual factors and sustainability of teacher development

Addressing contextual barriers such as time constraints and low motivation is a significant challenge for many school leaders. This study highlights the importance of strategic leadership in managing these factors, as the principal at SD Pelita Fajar took proactive measures to mitigate their impact. Time allocation, for instance, is a common challenge in schools where the daily schedule is packed with administrative tasks, leaving little room for teachers to engage in professional learning activities. By restructuring schedules and setting aside specific times for professional development, the principal ensures that teachers can focus on their growth without feeling overwhelmed by other responsibilities. This approach not only demonstrates leadership but also reflects an understanding of the need for sustainable professional development systems that can thrive despite operational challenges.

In addition, the principal's efforts to address motivational barriers are indicative of an adaptive leadership approach that recognizes the diverse needs of teachers. Low motivation can be a significant barrier to professional development, particularly when teachers feel disconnected from the process or perceive the professional learning activities as irrelevant. By providing individualized support, such as coaching and recognition, the principal ensures that teachers remain motivated and engaged throughout the self-renewal cycle. This is consistent with research on teacher motivation, which suggests that when teachers feel valued and supported, they are more likely to participate actively in professional development activities (Hallinger & Murphy, 2013). Therefore, the principal's ability to navigate these contextual challenges ensures the long-term success and sustainability of teacher development initiatives.

Conclusion

This study successfully explored the instructional supervision strategies employed by the principal at SD Pelita Fajar and their impact on fostering teachers' capacity for self-renewal. The findings demonstrate that the principal's leadership is central to promoting professional growth, with the collaborative and evidence-based supervision cycle playing a critical role in enhancing teachers' self-renewal processes. By integrating a structured, data-driven approach with a strong emphasis on collaboration, the principal created an environment where teachers were empowered to take responsibility for their own professional development. This study confirms that effective instructional leadership is crucial for cultivating a culture of continuous professional growth, where teachers are not only supported but also actively engaged in their learning journey.

The identification of the four-phase self-renewal cycle—Exploration, Exploitation, Absorption, and Integration—provides a novel framework for understanding the process of teacher development. The E-E-A-I cycle emphasizes the importance of moving beyond traditional professional development models to one that is dynamic and cyclical, ensuring that new knowledge is continually applied, internalized, and integrated into everyday teaching practices. By linking these phases to concrete strategies, such as utilizing digital platforms for

exploration and collaborative feedback for integration, this study highlights that self-renewal is not a linear process, but a multifaceted, ongoing journey shaped by both individual effort and institutional support.

Furthermore, the study underscores the significant role of contextual factors in influencing the sustainability of professional development efforts. Time constraints and motivational challenges were identified as key barriers; however, the principal's proactive strategies, such as allocating time and providing personalized support, demonstrated how leadership can effectively manage these obstacles to ensure that professional learning continues. This finding suggests that successful teacher development programs must be responsive to the contextual realities of schools, providing both the structure and flexibility needed for sustained growth.

In conclusion, this study not only contributes to the growing body of research on instructional leadership and teacher development but also offers practical insights for school leaders looking to implement effective supervision strategies. By embracing a collaborative, data-driven, and contextually aware approach to professional development, school leaders can create environments where teachers continually renew their skills and adapt to the evolving demands of education. As such, this research offers valuable insights to educational stakeholders, including principals, policymakers, and educators, on cultivating a culture of lifelong learning that benefits both teachers and students.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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