

Teacher Professional Development Strategies through Effective Management

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Abstrak

Penelitian ini bertujuan untuk menganalisis strategi pengembangan profesional guru yang terintegrasi dalam praktik manajemen sekolah yang efektif. Latar belakang penelitian ini didasarkan pada pentingnya peningkatan kompetensi guru dalam menghadapi tuntutan Kurikulum Merdeka serta perkembangan pendidikan di era Revolusi Industri 4.0 dan Society 5.0. Meskipun berbagai program pengembangan telah dilakukan, masih terdapat keterbatasan dalam hal keberlanjutan, relevansi, serta keterpaduan antara pengembangan guru dan sistem manajemen sekolah. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus. Informan terdiri atas kepala sekolah, guru, dan staf manajerial di satuan pendidikan dasar yang dipilih secara purposif. Teknik pengumpulan data meliputi wawancara mendalam, observasi langsung, dan analisis dokumen terkait perencanaan dan pelaksanaan pengembangan profesional guru. Data dianalisis dengan teknik reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa strategi pengembangan profesional guru dirancang secara partisipatif dan berbasis kebutuhan, dilaksanakan melalui berbagai metode kolaboratif seperti pelatihan internal, komunitas belajar, lesson study, dan peer coaching, serta diawasi melalui supervisi akademik dan evaluasi program yang berkelanjutan. Faktor pendukung keberhasilan strategi ini mencakup kepemimpinan kepala sekolah, budaya kolaboratif, dan dukungan anggaran, sedangkan hambatannya meliputi keterbatasan waktu dan resistensi terhadap perubahan. Dari hasil tersebut disimpulkan bahwa efektivitas manajemen sekolah berperan penting dalam menciptakan ekosistem pembelajaran yang mendukung pengembangan profesional guru secara berkelanjutan. Temuan ini memberikan kontribusi konseptual dan praktis bagi kepala sekolah, pengambil kebijakan, dan pihak terkait dalam merancang strategi peningkatan mutu guru yang lebih strategis dan kontekstual.

Kata Kunci: *pengembangan profesional guru; manajemen sekolah; kepemimpinan pendidikan*

Abstract

This study aims to analyze teacher professional development strategies that are integrated in effective school management practices. The background of this research is based on the importance of improving teachers' competence in facing the demands of the Independent Curriculum and the development of education in the era of the Industrial Revolution 4.0 and Society 5.0. Although various development programs have been carried out, there are still limitations in terms of sustainability, relevance, and integration between teacher development and school management systems. This study uses a qualitative approach with a case study design. The informants consist of school principals, teachers, and managerial staff in the primary education unit who are selected purposively. Data collection techniques include in-depth interviews, direct observation, and document analysis related to the planning and implementation of teacher professional development. Data is analyzed by data reduction techniques, data presentation, and conclusion drawn. The results of the study show that teachers' professional development strategies are designed in a participatory and needs-based manner, implemented through various collaborative methods such as internal training, learning communities, lesson studies, and peer coaching, and supervised through academic supervision and continuous program evaluation. Factors supporting the success of this strategy include principals' leadership, collaborative culture, and budget support, while the obstacles include time constraints and resistance to change. From these results, it is concluded that

the effectiveness of school management plays an important role in creating a learning ecosystem that supports the professional development of teachers in a sustainable manner. These findings provide conceptual and practical contributions for school principals, policy makers, and related parties in designing more strategic and contextual teacher quality improvement strategies.

Keywords: *professional development of teachers; school management; Educational Leadership*

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Introduction

Teachers play a central role in efforts to improve the quality of education, because the quality of the process and learning outcomes are highly dependent on the professional capacity possessed by teachers (Kawuryan et al., 2021; Snoek, 2021). As the spearhead in the implementation of the curriculum at the education unit level, teachers are required to have adequate pedagogical, personality, social, and professional skills to create a meaningful learning experience for students. Along with the times, the challenges faced by teachers are increasingly complex (Ghani & Triono, 2024; Sanjaya et al., 2022). The implementation of the Independent Curriculum, which emphasizes differentiation-based learning and strengthening the profile of Pancasila students, requires teachers to continuously update their knowledge, skills, and adaptive learning strategies (Istiani & Islamy, 2020). In addition, the emergence of the Industrial Revolution 4.0 and the Society 5.0 era has added a new dimension to the world of education, namely the integration of digital technology, artificial intelligence, and data literacy in the learning process, all of which require new competencies for teachers.

In this context, teacher professionalism can no longer be seen as a fixed status, but rather as a process that must be continuously developed through lifelong learning (Kim, 2024; Zhang et al., 2021). But in reality, there are still many teachers at various levels of education who have not fully mastered these competencies optimally (Sodikin et al., 2022). This can be seen from the low level of learning innovation, limited effective use of technology, and lack of teacher participation in meaningful self-development activities (Çelik et al., 2021). This condition shows that improving teacher professionalism is still a crucial issue in the world of education, which requires a strategic and systematic approach so that the role of teachers in facing the dynamics of modern education can run optimally (Menter & Flores, 2021).

Although the importance of teacher professional development has been a concern in various education policies, its implementation in the field still faces significant obstacles (Kazan Federal University et al., 2022). One of the main problems is the limited access of teachers to targeted continuous training programs (Vadivel et al., 2021). Many of the trainings are general and do not pay attention to the specific needs of teachers based on the field, level of experience, or contextual challenges faced in the classroom. In addition, professional development activities tend to be carried out administratively as a form of fulfilling the workload or formal obligations alone, without any real follow-up that has an impact on improving competencies and learning quality (Garba, 2024). This leads to the low effectiveness of the programs that have been carried out. On the other hand, there is a disparity between teacher professional development policies and managerial practices at the education unit level (Ostinelli & Crescentini, 2024; Popova et al., 2022). The lack of integration between teacher development programs and strategic school management systems makes efforts to increase teacher capacity not run in a sustainable and directed manner (Håkansson & Adolfsson, 2022). The principal as an education manager has not fully optimized his role in designing a development strategy that suits the needs of teachers and the vision of the school (Muhammad Baiqun Isbahi, 2023). As a result, professionalism improvement initiatives are often incidental, non-contextual, and not oriented to learners' learning outcomes. These issues demonstrate the urgent need to build a more structured, relevant, and aligned approach to professional development with effective school management strategies.

In the context of teacher professional development, school management plays a very strategic role, especially in the aspect of human resource management (HR) (Tuytens et al., 2023). The principal is not only responsible for the administrative aspect, but also as a learning leader who has the authority and responsibility to design teacher development strategies in a directed and sustainable manner (Pan & Chen, 2021; Zhixian, 2023). Careful planning, based on data and the real needs of teachers, is an

important basis for formulating capacity building programs that are relevant and have a direct impact on learning practices in the classroom (Munyi Monica Werimba, 2024). Through effective management, schools can build a professional development system that is not only fixated on formal training, but also includes constructive academic supervision, the formation of professional learning communities, and career development mechanisms based on individual performance and potential. Effective management also plays a role in creating an organizational climate that is conducive to the growth of a learning culture among teachers (Kareem et al., 2025). A school environment that supports collaboration, reflection, and innovation will encourage teachers to continuously improve their competencies voluntarily and sustainably (Vlachopoulos et al., 2023). In addition, the involvement of school principals in facilitating mentoring, coaching, and evaluation of teacher development programs will strengthen the relationship between managerial strategies and overall quality improvement of education. Thus, the success of teacher professional development cannot be separated from the quality of school management, which is able to direct, motivate, and empower teachers as the main agents of educational change.

Although the topics of teacher professional development and the effectiveness of school management have been extensively researched, most studies tend to address the two aspects separately. Previous studies have generally focused on the effectiveness of teacher training programs, teacher learning models, or on the other hand examining the leadership roles of principals and school management in a broader context. However, there have not been many studies that specifically review the direct relationship between effective management strategies and overall teacher professional development, especially in the context of implementation at the education unit level. In fact, impactful professional development is not only determined by the quality of the training program, but also relies heavily on a management system that organizes, directs, and evaluates the process on an ongoing basis (Kilag et al., 2023). In addition, there are still limited studies that integrate managerial approaches with the contextual needs of teachers in the field are important gaps that need to be answered. Many professional development approaches have not considered factors such as school culture, transformative leadership, and the role of the principal as an instructional leader (Bellibaş et al., 2021; He et al., 2024). Therefore, research is needed that does not only see teacher professional development as a separate activity, but as part of a managerial system that is strategic, structured, and adaptive to the dynamics of teacher needs and current educational demands.

Based on the urgency and problems that have been described, this article aims to analyze teacher professional development strategies that are directly integrated in effective school management practices. This research seeks to identify how school management, especially in terms of human resource management, can design, implement, and evaluate professional development programs that are not only formal, but also contextual, sustainable, and have a real impact on improving teacher competence. This analysis is also directed to explore the role of principals as key actors in creating an organizational climate that supports teachers' professional learning through strategic and transformative managerial approaches. In addition to making a conceptual contribution to the literature on education management and teacher professional development, this article is also expected to make a practical contribution to stakeholders, especially school principals, education policy makers, and parties involved in the planning and implementation of teacher capacity building programs. By understanding the relationship between effective management strategies and the professional growth of teachers, it is hoped that a more holistic, systematic, and relevant approach model will be formed to meet the needs of current and future education.

Methodology

This study uses a qualitative approach with a case study design, which aims to gain an in-depth understanding of teachers' professional development strategies that are integrated in effective school management practices. This approach was chosen because it allows researchers to explore the phenomenon contextually and holistically, especially in exploring managerial practices that contribute to improving teacher competence. The research subjects consist of principals, teachers, and managerial staff who are directly involved in the planning and implementation of professional development programs in the selected educational units. Data collection techniques are carried out through in-depth interviews, direct observation of managerial activities, and analysis of documents such as school work plans, supervision reports, and documentation of teacher training activities. The data obtained is analyzed qualitatively through the process of data reduction, data presentation, and conclusion drawn,

as stated by Miles and Huberman. Through this approach, it is hoped that a comprehensive picture of how school management strategically supports teacher professional development in a real context.

Results and Discussion

Teacher Professional Development Strategy Planning

The results of the study show that the planning of teacher professional development strategies in the schools studied is carried out systematically and based on the analysis of teachers' real needs. School principals actively identify the need to improve teacher competency through various data sources, such as classroom supervision results, individual teacher reflections, and performance achievement reports based on education report cards. This information is then used as the basis for formulating relevant and contextual development programs, such as internal training, collaborative workshops, and scanning activities between teachers. This planning is not prepared unilaterally, but involves the participation of teachers and the school development team to ensure the linkage between the designed program and the learning needs in the classroom. In addition, teacher development strategies are aligned with the vision, mission, and medium- and long-term goals of the school, especially in efforts to improve the quality of learning and achieve school performance indicators. These findings show that school principals have carried out their role as instructional leaders, where teacher development planning is not only administrative but also part of the education quality improvement strategy. This approach reflects participatory and responsive human resource management practices, which focus on empowering teachers as agents of change in the school environment. The integration between individual needs of teachers and the direction of school policies shows that effective education management can be an important foundation in building an adaptive and sustainable learning ecosystem.

Implementation of Teacher Professional Development

In its implementation, the professional development strategy of teachers in schools is carried out through various forms of collaborative and participatory activities. These activities include internal training facilitated by senior teachers or external resource persons, the formation of teacher learning communities such as KKG and MGMP at the school level, the implementation of lesson studies to develop learning practices, and peer coaching as a medium for mutual feedback between peers. School principals play an active role in encouraging the sustainability of this activity, both through the provision of special time outside teaching hours, resource allocation, and strengthening the culture of sharing and reflection in the teacher community. In these activities, teachers are given space to discuss challenges in the classroom, design innovative learning strategies, and evaluate the impact of their teaching practices collectively.

These findings show that the implementation of professional development is not carried out top-down, but rather through a collaborative approach that places teachers as active subjects in the process of capacity building. The role of principals in facilitating professional interaction between teachers and creating a work climate that supports shared learning reflects the practice of transformational leadership, where leaders focus on empowering, inspiring, and motivating organizational members. More than that, this condition also describes the process towards the formation of a learning organization, namely schools as learning organizations that continue to develop through knowledge exchange, joint reflection, and continuous innovation. Thus, the implementation of a collaborative professional development strategy not only improves teacher competence, but also strengthens cohesion and quality culture in the school environment.

Supervision and Evaluation of Development Programs

The results of the study show that supervision of the implementation of teacher professional development is carried out on a scheduled and consistent basis by the principal. This supervision does not only focus on the administrative aspect, but emphasizes more on improving learning practices in the classroom through direct observation, reflective discussions, and providing constructive feedback. The principal uses academic supervision instruments to assess the implementation of training results by teachers, as well as encourage teachers to reflect on their teaching practices. In addition, there is a continuous monitoring mechanism for the effectiveness of training programs and other development activities, such as through post-training reports, evaluation of student learning outcomes, and regular meetings of the school development team. The feedback obtained from the supervision and monitoring is used as a basis for refining the next development strategy to be more contextual and adaptive to the dynamics in the field.

The discussion of these findings confirms that academic supervision has a key role in overseeing the effectiveness of teacher professional development. When supervision is carried out systematically and focuses on improving the quality of learning, teachers not only feel accompanied, but also more motivated to apply new knowledge and skills optimally. On the other hand, the structured development program evaluation process allows schools to adapt managerial strategies to the challenges that arise, both internal such as teacher resistance, and external ones such as resource limitations. Thus, supervision and evaluation serve as a link between the planning and implementation of development strategies, as well as a mechanism for continuous control and improvement in effective school management.

Supporting and Inhibiting Factors

In the implementation of the teacher's professional development strategy, a number of supporting factors were found that played an important role in encouraging the success of the program. One of the main factors is the visionary and transformative leadership of the principal, who is able to direct and inspire teachers to continuously improve their competence. In addition, the formation of a collaborative culture in the school environment which is reflected through openness, mutual sharing of good practices, and support between teachers is also an important social capital in supporting the sustainability of the program. Budget support from the School Operational Assistance (BOS) fund is used flexibly to finance training activities, procurement of resource persons, and the purchase of supporting teaching materials, which shows that there is an adaptive school financial management to the needs of improving the quality of human resources.

However, the implementation of the strategy also faces several obstacles. Among them are the limited time that teachers have due to the heavy teaching load and high administrative demands, so that the space to participate in development activities is often limited. In addition, there are still some teachers who are not fully responsive to change, especially in terms of the use of learning technology or the application of innovative methods. This condition shows the need for more careful time management and resource allocation, so that professional development activities do not become an additional burden, but are an integral part of teachers' daily practice. In addition, a stronger motivational strategy and leadership approach are needed that are able to encourage organizational culture change towards an environment that truly supports continuous learning. A paradigm shift from simply fulfilling obligations to a desire to continue to develop must be instilled as a shared value in an effective school organization.

The Impact of Strategy on Teacher Competence

The implementation of an integrated professional development strategy in effective school management has a significant positive impact on improving teacher competence. Findings in the field show that teachers become more confident in carrying out the learning process, especially in choosing and applying varied approaches according to the characteristics of students. Teachers are no longer fixated on conventional methods, but rather begin to explore active learning techniques, the use of educational technology, and more relevant formative assessment models. In addition, there has been an increase in teachers' ability to develop a more systematic and outcome-oriented learning plan, as well as deeper self-reflection on the teaching process. Reflective activities facilitated through supervision and learning communities have assisted teachers in identifying weaknesses, as well as designing improvements for future learning.

The discussion of these findings corroborates that effective school management not only has an impact on organizational governance, but also contributes directly to the professional growth of teachers. A structured and collaborative managerial strategy creates space for teachers to grow, feel valued, and have a strong orientation towards self-improvement. This emphasizes the importance of the relationship between managerial policy and the quality of learning in the classroom. When the principal is able to play his role as a transformative learning leader, the school ecosystem becomes more conducive to the birth of professional, adaptive, and reflective teachers. Thus, professional development strategies designed and implemented in a managerial manner make a real contribution to improving the quality of the teaching and learning process and, ultimately, student learning outcomes.

Conclusion

Based on the results of the study, it can be concluded that teacher professional development strategies that are integrated in effective school management make a real contribution to improving competence and learning quality. Program planning is carried out in a participatory manner and based on the analysis of teachers' real needs, which shows the leadership of the principal as an instructional leader. The implementation of development activities is collaborative through various approaches such as internal

training, learning community, lesson study, and peer coaching, which strengthens the role of schools as learning organizations. Academic supervision and program evaluation are carried out in a structured manner and oriented towards reflection and continuous improvement. Despite challenges such as time constraints and some teachers' resistance to change, transformative leadership support and collaborative culture are key drivers of the success of this strategy. Overall, this study confirms that the effectiveness of school management has a crucial role in ensuring that teachers' professional development takes place in a sustainable, contextual, and direct impact on the quality of education.

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