

OPTIMIZING THE USE OF PRINCIPAL PERFORMANC MANAGEMENT FEATURES IN THE INDEPENDENT TEACHING PLATFORM IN ELEMENTARY SCHOOLS

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ARTICLE HISTORY

Received : 22-01-2026

Revised : 08-08-2026

Accepted : 10-09-2026

KEYWORDS

*Merdeka Mengajar
Platform, school
leadership,
performance
management,
educational
technology, teacher
professional
development.*

ABSTRACT

This qualitative study aimed to analyze the optimization of the Performance Management features within the Merdeka Mengajar Platform (PMM) by elementary school principals in Sekadau Hilir District. The research focused on leadership strategies, the supporting role of the Education Office, and the impact on teacher professionalism. Data were collected through in-depth interviews, observations, and document analysis involving principals from four public elementary schools and analyzed thematically. The findings revealed that successful optimization was achieved through an adaptive leadership cycle implemented by principals, encompassing four strategic stages: shifting perceptions through socialization, applying differentiated and collaborative mentoring, conducting routine formative monitoring, and modeling a collaborative learning culture. However, the impact on teacher performance varied significantly, correlating directly with the principals' level of contextual responsiveness. While the district Education Office provided essential regulatory and accountability frameworks, a critical support gap persisted, as its assistance remained largely administrative and generic, failing to address schools' specific needs for infrastructure and direct technical aid. The study concludes that the realization of PMM's potential as a digital professional learning community hinges not merely on platform availability but on a synergistic ecosystem. It underscores the necessity of context-responsive school leadership paired with more concrete and responsive district-level support and, fundamentally, macro-level policies dedicated to ensuring digital equity through infrastructure investment.

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INTRODUCTION

Improving the quality of education in the globalization era required adaptation to digital transformation. In Indonesia, the "Merdeka Belajar" policy initiated by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) manifested this transformation, one of which was through the launch of the Merdeka Mengajar Platform (PMM). This platform was designed as a digitalized means to support the competency development and performance assessment of teachers and school principals (Kementerian Pendidikan Riset dan Teknologi., 2021). The integration of the performance management features in PMM with the national e-performance system marked the evolution of the assessment system from conventional administrative practices toward an integrated, real-time, data-based system (Perdirjen GTK No. 7607/BB.1/HK.03/2023).

Theoretically, the instructional leadership of school principals was a determining factor for the successful adoption of educational technology. Research showed the significant contribution of principal leadership to improving teacher performance (Jalilah et al., 2020; Sartika & Syifa, 2021). On the other hand, digital platforms like PMM were acknowledged for their potential to enhance accountability and transparency in performance management (Hidayat et al., 2021). However, the effectiveness of its field implementation was often hindered by complex challenges.

Although the potential of PMM and the role of principal leadership had been extensively studied separately, there was a research gap concerning how such leadership operationally optimized specific features within the digital platform to overcome contextual constraints. Previous studies focused more on perceptions or levels of technology adoption (Rahman et al., 2021), while in-depth exploration of *optimization strategies* employed by principals in environments with infrastructure limitations and technological competencies—such as in remote areas—remained limited. This study departed to fill this gap by qualitatively analyzing that optimization process within a real-world context.

The research area context, Sekadau Hilir District, represented the challenges of implementing educational technology in remote areas, including limited access to digital infrastructure and varied readiness of human resources (Puslitjakkidbud, 2020). This condition made the location a relevant case study to explore adaptive strategies in utilizing PMM.

Based on this background and research gap, this study aimed to analyze the optimization of the use of performance management features by school principals within the Merdeka Mengajar Platform at Elementary Schools in Sekadau Hilir District. The research focus encompassed: (1) strategies for optimizing performance management features in PMM by school principals, (2) the role and involvement of the Education Office in supporting this optimization, and (3) the impact of optimization on teacher performance in utilizing PMM.

METHOD

This study used a qualitative approach with a descriptive design. This approach was selected to provide an in-depth description of the process of optimizing the performance management features within the Merdeka Mengajar Platform (PMM), focusing on exploring the meanings, experiences, and strategies of the involved actors (Creswell & Poth, 2018). In line with this, the descriptive qualitative approach was considered effective for investigating the phenomenon of educational technology implementation in its natural context, as it is capable of revealing the dynamics of processes, challenges, and the complexity of practices in the field (Rahman et al., 2021; Alshehri & Cumming, 2020).

The research was conducted at four State Elementary Schools under the auspices of the Teacher Working Group (KKG) of the Tapang Semadak Cluster, Sekadau Hilir District. The selection of the location and participants was conducted through purposive sampling. The four schools were chosen because they had been actively implementing PMM. The key participants were the four principals from the selected schools, as they were considered the primary informants with the deepest understanding of the strategies for using and managing the performance features within the platform (Etikan et al., 2016). This sampling technique is common in qualitative research to ensure the acquisition of deep and relevant data from the most informative sources (Korstjens & Moser, 2018).

Data collection was carried out through three triangulation techniques: (1) Participant Observation, to directly witness the use of PMM in its natural setting in order to capture practical aspects not revealed in interviews (Kawulich, 2012); (2) In depth Semistructured Interviews with school principals, to explore strategies, experiences, perceptions, and obstacles in optimizing the performance management features; and (3) Document Study, of school archives and physical evidence of platform use as supporting data. The main research instrument was the researcher, assisted by observation guidelines, interview guides, and documentation sheets. To enhance data validity, source and method triangulation was performed, namely comparing and checking the consistency of data from the three techniques (Carter et al., 2014). Table 1 summarizes the connection between the research focus, indicators, data sources, and the data collection techniques used.

Table 1. Data Collection Instruments in Research

Research Focus	Indicator	Data	Data collection technique
1. What are the steps for optimizing principal performance management on the Merdeka Mengajar (PMM) platform?	Steps to Optimize Performance Management on the Merdeka Mengajar (PMM) Platform.	Principal of SDN 10 Tapang Semadak, SDN 15 Tapang Sambas, SDN 42 Suak Terentang and principal of SDN 54 Simpang Kayu Lapis.	1. Observation, 2. Interview 3. Documentation
2. How is the involvement of relevant agencies in optimizing the management of school principal performance on the Merdeka Mengajar (PMM) Platform?	Involvement of Relevant Agencies in Optimizing Principal Performance Management on the Merdeka Mengajar Platform	Principal of SDN 10 Tapang Semadak, SDN 15 Tapang Sambas, SDN 42 Suak Terentang and principal of SDN 54 Simpang Kayu Lapis.	1. Observation, 2. Interview 3. Documentation
3. How is teacher performance on the Independent Teaching Platform (PMM)?	teacher performance on the Independent Teaching Platform (PMM)	Principal of SDN 10 Tapang Semadak, SDN 15 Tapang Sambas, SDN 42 Suak Terentang, and principal of SDN 54 Simpang Kayu Lapis.	1. Observation, 2. Interview 3. Documentation

The collected data was then analyzed using the interactive model of (Miles et al., 2014), which includes three stages of activity flow: data reduction, data presentation, and conclusion drawing. In the data reduction stage, raw information is simplified and focused on aspects relevant to the research focus. Next, the data is presented in narrative and tabular form to facilitate understanding of patterns and relationships. From this presentation, final conclusions are formulated and verified.

Finally, to ensure data validity, this study employed several validation techniques, including persistent observation and triangulation. Extending the observation period in the field allowed the researchers to build rapport and deepen their contextual understanding, ultimately enhancing the credibility of the findings (Shenton, 2004). Through this series of rigorous methodological procedures, it is hoped that the research results will provide an accurate and scientifically sound picture of optimizing the performance management features on the Merdeka Mengajar Platform.

RESULTS AND DISCUSSION

Based on thematic data analysis, this study revealed three main findings related to the optimization of the Performance Management features within the Merdeka Mengajar Platform (PMM) in Elementary Schools of Sekadau Hilir District. The findings are presented separately between results (findings) and discussion to clarify the contributions of empirical data and its analysis.

RESULTS

A. School Principals' Leadership Strategies in Optimizing PMM

The data analysis indicated that optimization was carried out through an adaptive leadership cycle, consisting of four core stages. The first stage was Socialization and Aligning Perceptions. Principals actively played a role in shifting the narrative of PMM from an administrative burden to a professional development tool. As expressed by the Principal of SDN 10 Tapang Semadak, the initial focus was on preparing a collaborative work plan. Documentary evidence such as meeting agendas and attendance lists showed structured socialization to build shared ownership. However, challenges remained, as highlighted by the Principal of SDN 15 Tapang Sambas who expressed the need for direct mentoring alongside socialization.

The second stage was Differentiated Mentoring and Collaboration. Facing variations in teacher abilities, principals applied contextual strategies. In schools with limited resources like SDN 15 Tapang Sambas and SDN 42 Suak Terentang, principals utilized school operators, loaned devices, and formed small study groups. This peer-tutoring approach was also applied at SDN 54 Simpang Kayu Lapis, where proficient teachers assisted struggling colleagues. This strategy not only solved technical problems but also built professional solidarity and reduced technology anxiety.

The third stage was Routine Monitoring and Quick Feedback. Principals utilized the PMM dashboard for scheduled formative monitoring. At SDN 54 Simpang Kayu Lapis, this process resulted in well-documented feedback, where teachers provided reflection notes and the principal responded, creating a continuous improvement cycle. Conversely, at SDN 42 Suak Terentang, monitoring was hindered by teachers' dependency on the principal's or operator's assistance, showing that monitoring effectiveness heavily depended on teacher independence fostered through early mentoring.

The fourth stage was Modelling and Collaborative Learning. Leadership by example served as a catalyst for cultural change. By actively learning and acknowledging limitations as stated by the Principal of SDN 15 Tapang Sambas, "I also have to be able to" the principal created a safe environment for experimentation. This commitment was particularly evident at SDN 54 Simpang Kayu Lapis, where the principal not only monitored but also actively engaged in forums for sharing training results, encouraging the formation of a professional learning community.

B. The Institutional Role of the Education Office

The Education Office functioned as a facilitator and regulator, yet its implementation showed variation and challenges. First, in the Regulation and Socialization Function, the office initiated by providing initial socialization and guidance via WhatsApp groups. However, its effectiveness was limited, as complained by the Principal of SDN 15 Tapang Sambas regarding the minimal direct mentoring and school visits.

Second, in the Capacity Building Function, the office conducted Technical Guidance (Bimtek) and online training. Unfortunately, these trainings often did not reach all teachers due to device limitations, as experienced at SDN 15 Tapang Sambas where training was only attended twice and online. On the other hand, more structured efforts existed, such as the office's plan to conduct cluster-based training and appoint SDN 15 Tapang Sambas as the host, indicating a developing pattern of cascade training.

Third, in the Monitoring and Technical Support Function, the office conducted quarterly evaluations by requesting progress reports on SKP. This mechanism created accountability but remained administrative in nature. The expected technical support, such as device assistance and face-to-face training requested by SDN 42 Suak Terentang, was often not fulfilled. The request from the Principal of SDN 54 Simpang Kayu Lapis for direct supervisor visits to solve practical problems also indicated a gap between policy support and operational needs in the field.

C. Impact on Teacher Performance and Professionalism

The impact of PMM optimization on teacher performance varied significantly between schools, reflected in the frequency of feature use (Table 2) and categorized into three levels.

- 1) **High Level (Transformative):** Found at SDN 54 Simpang Kayu Lapis. Teachers not only frequently used all features (SKP, Lesson Planning, Monitoring, Feedback, Self-Training) but also integrated PMM materials with the local context and actively shared knowledge. The principal reported increased enthusiasm for self-directed learning and teacher autonomy.
- 2) **Medium Level (Developing):** SDN 10 Tapang Semadak represented this category. Teachers frequently filled out SKP and participated in self-training, showing responsibility for self-development. However, the use of lesson planning and feedback features was still "occasional," and there were notes about some teachers' lack of discipline in updating activity logs.
- 3) **Low Level (Emerging):** SDN 15 Tapang Sambas and especially SDN 42 Suak Terentang were at this level. The use of PMM features was mostly "occasional" to "rare." The main obstacles were infrastructure limitations (devices, signal) and low teacher autonomy, leading to dependency on the principal or operator. At SDN 42 Suak Terentang, teachers tended to be passive and waited for assistance.

Table 2. Summary of Frequency of PMM Feature Use by Teachers

School	SKP	Lesson Planning	Monitoring & Evaluation	Performance Feedback	Self-Training
SDN 10 Tapang Semadak	Often	Occasional	Often	Occasional	Often
SDN 15 Tapang Sambas	Occasional	Occasional	Rare	Rare	Occasional
SDN 42 Suak Terentang	Rare	Rare	Rare	Rare	Occasional
SDN 54 Simpang Kayu Lapis	Often	Often	Often	Often	Often

Description: Often (>2x/week); Occasional (1-2x/week); Rare (<1x/week)

This variation revealed that adaptive school leadership was a determining factor in overcoming obstacles. Facing the same challenges like infrastructure limitations and variations in teacher ability, principals' responses differed. At SDN 42 Suak Terentang, the strategy was still reactive (loaning laptops, one-on-one mentoring by the operator). In contrast, at SDN 54 Simpang Kayu Lapis, the strategy was proactive and systematic (forming internal teams, facilitating sharing forums, providing structured feedback). It was this difference in approach that strongly correlated with the level of teacher performance and autonomy.

However, behind these positive impacts, this study clearly identified major persistent challenges requiring adaptive strategies from school leadership. These challenges were structural and cultural, not merely technical.

Table 3. Implementation Challenges and Principals' Adaptive Strategies

Challenge	Number of Schools Experiencing	Example of Principal's Adaptive Strategy (Interview Quote)
Digital Infrastructure Constraints (unstable internet access, limited devices)	3 out of 4 schools	<i>"We made the filling time flexible. If the network is bad, teachers can fill it out at home or we collect the data offline first."</i> (Principal of SDN 42 Suak Terentang)
Variation in Teachers' Technological Ability	4 out of 4 schools	<i>"We applied differentiated mentoring. Those already proficient we made peer tutors, for those still learning we provided intensive one-on-one guidance."</i> (Principal of SDN 54 Simpang Kayu Lapis)
Perceived Increase in Administrative Burden	3 out of 4 schools	<i>"We integrated PMM tasks with routine work. For example, teaching reflection is filled out immediately after the lesson, not piled up at the end of the month."</i> (Principal of SDN 10 Tapang Semadak)

Table 3 reveals the essence of adaptive leadership in a resource-limited context. Facing infrastructure constraints, principals responded with flexibility in time and method (e.g., offline data collection). Addressing ability variation, they differentiated mentoring and utilized peer learning. To overcome the perception of added burden, they integrated digital tasks into routine workflows. These contextual responses showed that success did not lie in eliminating obstacles, but in the leadership's ability to design *workarounds* that allowed the process to continue.

DISCUSSION

A. Synthesis of Transformational Leadership and Technology in a Limited Context

The finding that optimization success heavily depended on the principal's leadership style and managerial strategies reinforces research by (Hartanto, 2024) and (Rahayu, 2024) on the central role of the principal in building a responsive work culture. However, this study provided deeper nuance: effective leadership in a resource-limited context was adaptive and contextual leadership, not merely transformational. The principals at SDN 54 Simpang Kayu Lapis and SDN 10 Tapang Semadak succeeded because they not only motivated (transformational) but also designed specific technical and social solutions (technology integration), such as peer tutoring and integrating PMM tasks into daily workflows. This aligns with (Isnayetti & Susanto, 2024) who found that the principal's technical-operational support is often more crucial than direct moderating influence.

The expansion of this theoretical framework was supported by international literature. Studies from other resource-limited regions indicate that effective leadership for technology integration must be able to adapt to specific constraints, as explained in the concept of adaptive leadership in educational technology (Brown & Williams, 2022). Findings on the varied responses to infrastructure challenges (e.g., time flexibility at SDN 42 vs. forming learning communities at SDN 54) show that the technology integration leadership framework needs to be expanded with the concept of context-responsive leadership for disadvantaged areas. The implication is that future principal leadership development programs must incorporate training in contextual solution design and innovative resource management, not just motivational skills (Johnson & Smith, 2023).

B. Systemic Ecology: Synergy and Gaps Between School and District Levels

Synergy between the school (micro) and district (meso) levels is indeed important, as stated in the ecological framework (Zheng et al., 2021). This study confirmed that district support in the form of regulation, Bimtek (technical

guidance), and quarterly monitoring provided a basic framework and accountability. However, the findings also revealed a critical ecological gap. District support tended to remain generic (online socialization, limited training) and administrative (report requests), while school needs were highly contextual and practical: devices, a stable internet signal, face-to-face training, and direct mentoring visits. Complaints from principals about minimal visits and unfulfilled requests for device assistance indicate that the enabling environment from the district was not fully responsive.

Consequently, the ecological framework model needs to emphasize responsiveness and alignment of support forms across levels. As suggested by (Mulyasa, 2021), the role of the supervisor as a bridge is vital to facilitate communication of specific needs from the school to the district. Macro support must be able to adapt to diverse micro realities, a principle also emphasized in research on educational policy implementation across countries (Fullan, 2021). The district needs to establish more dynamic feedback mechanisms, such as a mobile technical support unit or a needs-based monitoring system that proactively identifies and responds to difficulties in the field, thereby transforming support from merely fulfilling obligations to truly enabling (*enabling*).

C. PMM as Professional Learning Infrastructure: Potential and Prerequisites

The positive impact of PMM on teacher planning, reflection, and self-directed learning, especially in schools with strong adaptive leadership, supported its potential as a Digital Professional Learning Community (PLC) infrastructure, in line with the principle of evidence-based learning (Guskey, 2014). The findings at SDN 54 Simpang Kayu Lapis, where a cycle of reflection-feedback and knowledge sharing occurred, were a tangible manifestation of a digital PLC that encouraged evidence-based practice development.

However, findings from other schools presented prerequisites that cannot be ignored: a digital PLC culture does not grow automatically from the platform's presence. Its growth requires (1) facilitative leadership that builds collaborative routines and a culture of mutual trust (Handayani et al., 2024), and (2) adequate basic digital infrastructure. Persistent infrastructure challenges, as experienced by SDN 42 Suak Terentang, were not merely technical disruptions but structural barriers to digital equity. This confirms the warning from (Rahman et al., 2021) and illustrates the limits of school leadership. Even the most adaptive principal cannot create internet signals or provide devices for all teachers without massive policy and budgetary support from a higher level. This perspective aligns with global findings that the digital divide is a systemic challenge requiring coordinated policy intervention, not just local initiatives (UNESCO, 2023).

D. Implications and Proposed Model: Adaptive Leadership in a Responsive Digital Ecosystem

Implicitly, the synthesis of these findings demands a more holistic systemic approach. Instead of focusing only on optimization at the school level, a responsive tiered support model is required. The proposed model is "Adaptive Leadership within a Responsive Digital Ecosystem". This model has three components that must synergize:

1. Contextual and Facilitative School Leadership: Combining exemplary behavior, differentiation strategies, and community of practice building.
2. Responsive and Concrete District Support: Moving beyond generic regulation and training, towards direct mentoring, targeted infrastructure assistance, and easily accessible technical support mechanisms.
3. Digital Infrastructure Investment as a Foundation for Equity: Central and local policies must prioritize equalizing internet access and devices as a prerequisite for equity, not as a complement.

Without components (2) and (3), the burden of digital transformation will continue to accumulate on the shoulders of school principals, risking *innovation fatigue* and widening the quality gap between schools, as clearly seen in the performance spectrum from SDN 54 to SDN 42 Suak Terentang. The optimization of PMM, ultimately, is a test for the entire education ecosystem to demonstrate responsiveness and commitment to equity.

CONCLUSION

This study concludes that the successful optimization of the performance management features in the Merdeka Mengajar Platform (PMM) in elementary schools within Sekadau Hilir District was primarily driven by adaptive and context-responsive school leadership. Principals who implemented a strategic four-stage cycle comprising

socialization, differentiated mentoring, routine monitoring, and collaborative learning—were able to transform PMM from a perceived administrative burden into an effective tool for teacher professional development. However, the impact on teacher performance varied significantly across schools, ranging from transformative to emerging levels, correlating directly with the principal's ability to design and apply adaptive strategies. While the Education Office provided foundational regulatory, capacity-building, and accountability support, a critical gap persisted between this generic administrative support and the practical, context-specific needs of the schools, particularly regarding infrastructure and direct technical assistance. Ultimately, the research underscores that PMM's potential as a digital professional learning community is not realized automatically but depends on a synergistic, multi-level ecosystem.

Based on the findings, the study offers the following integrated suggestions. First, for school-level practice, district education offices should institutionalize a continuous professional development program focused on developing "context-responsive digital leadership" for principals. This program should move beyond generic motivational training to include modules on designing peer-mentoring systems, integrating digital tasks into pedagogical workflows, and managing technology adoption in low-resource settings. Second, for district-level policy, the Education Office must enhance its support system by establishing a responsive technical support unit. This unit should shift from purely administrative monitoring to providing direct, on-demand assistance—such as school visits for troubleshooting, targeted device lending programs, and cluster-based face-to-face workshops tailored to identified local challenges. Third, for macro-level stakeholders, a coordinated policy is imperative to address the foundational issue of digital equity. Provincial and national authorities must prioritize and accelerate infrastructure investment to ensure reliable internet access and adequate device availability in remote schools. Without this foundational equity, even the most adaptive local leadership will struggle to prevent the widening of educational quality gaps. Future research could longitudinally track the implementation of the proposed "Adaptive Leadership within a Responsive Digital Ecosystem" model and explore its applicability in other regions with similar resource constraints.

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