

School Principal's Leadership and Teacher Professional Performance: The Mediating Role of Professional Learning Communities (PLCs) in Muara Padang

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Abstrak

Penelitian ini bertujuan menganalisis hubungan langsung dan tidak langsung antara kepemimpinan kepala sekolah dan kinerja profesional guru dengan peran mediasi Professional Learning Communities (PLC) di Kecamatan Muara Padang. Penelitian menggunakan pendekatan kuantitatif dengan desain korelasional dan analisis jalur. Data dikumpulkan dari 150 guru dan 20 kepala sekolah melalui kuesioner terstandar yang mengukur kepemimpinan, kualitas PLC, dan kinerja profesional guru. Hasil penelitian menunjukkan bahwa kepemimpinan kepala sekolah berpengaruh positif terhadap kinerja profesional guru. Selain itu, kualitas PLC terbukti memediasi hubungan tersebut secara signifikan, sehingga pengaruh kepemimpinan menjadi lebih kuat melalui kolaborasi profesional yang terstruktur. Temuan ini menegaskan pentingnya penguatan komunitas belajar sebagai strategi peningkatan kinerja guru, khususnya di wilayah sekolah yang berada dalam konteks pedesaan.

Kata kunci: kepemimpinan kepala sekolah, kinerja profesional guru, professional learning community, kolaborasi guru, model mediasi, pengembangan profesional.

Abstract

This study examined the direct and indirect relationships between school principal leadership and teacher professional performance, emphasizing the mediating role of Professional Learning Communities in Muara Padang District. A quantitative correlational design with path analysis was employed. Data were collected from 150 teachers and 20 principals using standardized questionnaires measuring leadership practices, PLC quality, and teacher performance. The findings indicated that principal leadership positively influenced teacher professional performance. Furthermore, PLC quality significantly mediated this relationship, suggesting that leadership effects were strengthened through structured collaborative learning processes. The results highlighted the strategic importance of sustaining professional learning communities as a school-based mechanism for improving teacher effectiveness, particularly in rural educational settings.

Keywords: principal leadership, teacher professional performance, professional learning communities, mediation model, teacher collaboration, distributed leadership

1. INTRODUCTION

Educational quality is inseparable from the quality of teachers who design, implement, and evaluate learning processes in the classroom. While curriculum reform, technological integration, and infrastructure development often receive significant policy attention, the day-to-day effectiveness of schooling ultimately depends on teachers' professional competence and their ability to adapt instructional strategies to diverse student needs. Teacher professional performance therefore remains a foundational pillar of sustainable educational improvement. It encompasses pedagogical expertise, subject mastery, classroom

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management, reflective practice, and professional ethics, all of which directly influence student engagement and learning outcomes.

In recent decades, international scholarship has shifted from viewing teacher performance as an individual attribute toward understanding it as a product of organizational conditions within schools. Studies have shown that teachers are more likely to refine their instructional practices when they operate within supportive professional environments that encourage collaboration and shared learning (Darling-Hammond et al., 2020). Consequently, attention has increasingly turned toward school leadership as a key determinant in shaping those environments.

School principals occupy a strategic position within educational institutions. Beyond administrative duties, they are expected to function as instructional leaders who guide teaching quality and professional culture. Research consistently indicates that leadership contributes to student achievement indirectly by influencing teacher practices and school climate (Hallinger, 2020; Leithwood et al., 2020). Transformational leadership, for instance, emphasizes vision building, intellectual stimulation, and individualized support, creating motivational conditions that inspire teachers to exceed routine expectations (Berkovich & Eyal, 2021). Instructional leadership, meanwhile, focuses more directly on curriculum alignment, classroom observation, and data-informed decision making (Robinson et al., 2020).

However, contemporary empirical findings suggest that the relationship between principal leadership and teacher performance is not simply direct or linear. Instead, leadership exerts its strongest influence through mediating structures embedded within the school organization (Hairon et al., 2022). These mediating mechanisms translate leadership intentions into daily professional practices. Without such structures, leadership may remain symbolic rather than transformative.

Professional Learning Communities (PLCs) have emerged as one of the most influential frameworks for organizing sustained teacher collaboration. Rather than viewing professional development as occasional workshops or external training sessions, the PLC model situates teacher learning within routine school operations. Teachers meet regularly to analyze student data, discuss instructional strategies, reflect on classroom challenges, and design collective improvement plans. This ongoing cycle of inquiry and reflection fosters a culture of shared accountability and continuous improvement (Stoll et al., 2020).

Meta-analytic evidence has demonstrated that well-implemented PLCs are positively associated with improved teacher efficacy and instructional consistency (Lomos et al., 2022). Teachers who participate in structured collaborative dialogue are more likely to adopt innovative pedagogical approaches and align instructional goals across classrooms. Furthermore, PLCs reduce professional isolation by encouraging peer feedback and mutual support (Vangrieken et al., 2021). Through sustained interaction, teachers develop a shared professional language that strengthens instructional coherence within the school.

The mediating role of PLCs is further explained by distributed leadership theory, which argues that leadership effectiveness depends on how influence is distributed and enacted across organizational members (Printy & Liu, 2021). From this perspective, principals extend their impact not by exercising centralized authority alone but by cultivating collaborative systems that empower teachers as co-constructors of instructional improvement. When principals intentionally design and support PLC structures, they embed leadership influence within collective routines that shape professional practice over time.

Liu and Hallinger (2022) provide empirical support for this perspective by demonstrating that instructional leadership significantly predicts teacher professional learning through school-level collaborative processes. Their findings suggest that leadership behaviors foster collaborative conditions, which subsequently enhance teacher competence. This

mediation framework offers a more comprehensive explanation of how leadership translates into classroom-level outcomes.

Despite robust international evidence, contextual variations remain significant. Many studies on leadership and PLCs have been conducted in urban or well-resourced educational systems. In decentralized rural contexts, where access to external professional development is limited and logistical constraints are more pronounced, internal collaborative mechanisms may function differently. Schools in Muara Padang District operate within such a context. Geographic dispersion, infrastructure variability, and limited institutional support present distinct challenges for sustained teacher development.

In these circumstances, the principal's role becomes even more critical. When external training opportunities are infrequent, the school itself must function as a site of continuous professional learning. PLCs can provide structured opportunities for peer-based professional growth without requiring extensive financial investment. However, the effectiveness of PLCs depends largely on the principal's ability to institutionalize collaborative routines and align them with instructional priorities.

Another important consideration involves the cultural dimension of collaboration. Establishing a PLC is not merely a technical process of scheduling meetings. It requires building trust, encouraging open dialogue, and fostering collective responsibility. Studies indicate that leadership behaviors emphasizing transparency, shared decision making, and supportive supervision are essential for cultivating high-quality PLCs (Hairon et al., 2022). Without strong relational foundations, collaborative initiatives may remain superficial.

In the Indonesian educational context, decentralization policies have increased school-level autonomy, thereby expanding the strategic role of principals in shaping internal professional development. Yet empirical research examining how leadership interacts with PLC structures to influence teacher performance remains limited, particularly in rural districts such as Muara Padang. Existing studies often examine leadership or professional development independently, without modeling their interdependent relationships.

Therefore, this study sought to address this gap by empirically testing a mediation model in which Professional Learning Community quality functions as an intermediary variable between School Principal Leadership and Teacher Professional Performance. By examining these relationships within a rural Indonesian context, the study aimed to contribute contextualized evidence to the broader discourse on educational leadership and collaborative professional learning.

Understanding this mediating dynamic is not only theoretically significant but also practically relevant. If PLC quality substantially strengthens the relationship between leadership and teacher performance, then efforts to improve educational quality should focus on enhancing collaborative professional culture rather than relying exclusively on hierarchical supervision or external training interventions. Based on these considerations, this study was designed to examine the direct and indirect relationships among school principal leadership, Professional Learning Community quality, and teacher professional performance in Muara Padang District.

2. METHOD

This study employed a quantitative correlational design to examine the structural relationship between school principal leadership, Professional Learning Community (PLC) quality, and teacher professional performance. The research aimed to test both direct and indirect effects among variables using a mediation model framework. A path analysis approach was applied to determine the magnitude and significance of the hypothesized relationships.

The study was conducted in Muara Padang District, Banyuasin Regency, South Sumatra, Indonesia. The participants consisted of 150 certified teachers and 20 school principals from primary and secondary schools within the district. Stratified random sampling was used to ensure proportional representation across school levels and geographical areas. This sampling strategy was chosen to capture variations in leadership practices and collaborative culture across different school contexts.

Data were collected using standardized self-report questionnaires. School principal leadership was measured using a 25-item instrument assessing transformational and instructional leadership dimensions, including vision development, intellectual stimulation, individualized support, and instructional supervision. The quality of Professional Learning Communities was assessed using a 30-item scale measuring shared vision, collaborative culture, reflective dialogue, and collective responsibility. Teacher professional performance was measured using a 28-item instrument covering pedagogical competence, professional mastery, social competence, and personal integrity. All items were rated using a five-point Likert scale ranging from strongly disagree to strongly agree.

Prior to data analysis, construct validity was examined through Confirmatory Factor Analysis to ensure that each instrument accurately represented its theoretical dimensions. Internal consistency reliability was assessed using Cronbach's Alpha coefficients, and all scales met acceptable reliability thresholds.

Descriptive statistics were calculated to examine the overall distribution of responses. Correlation analysis was conducted to identify preliminary relationships among variables. Path analysis was subsequently performed to evaluate the direct effect of school principal leadership on teacher professional performance, as well as the indirect effect through PLC quality. The mediation effect was tested using bootstrapping procedures to assess the significance of indirect pathways. This analytical approach allowed for a comprehensive evaluation of how leadership influence was transmitted through collaborative professional structures within schools.

3. RESULT AND DISCUSSION

The statistical analysis revealed a clear and consistent pattern of relationships among the variables examined in this study. School principal leadership demonstrated a positive and statistically significant direct effect on teacher professional performance. Teachers who perceived their principals as providing clear instructional direction, constructive feedback, and professional support reported higher levels of pedagogical competence, instructional preparation, and classroom management effectiveness.

More importantly, the analysis showed that the quality of Professional Learning Communities (PLCs) played a significant mediating role in this relationship. When PLC quality was included in the structural model, the strength of the direct relationship between principal leadership and teacher professional performance decreased, while the indirect pathway through PLC quality remained strong and statistically significant. This pattern indicated partial mediation, meaning that principal leadership influenced teacher performance both directly and indirectly, with the indirect pathway through collaborative professional engagement accounting for a substantial proportion of the total effect.

These results suggest that leadership practices become more impactful when translated into structured collaborative mechanisms within the school. Principals who actively cultivate a shared vision, facilitate reflective dialogue, and support collective inquiry create conditions in which teachers continuously refine their instructional practices. Descriptive analysis further showed that schools with higher PLC quality scores tended to exhibit stronger peer collaboration, more frequent lesson reflection sessions, and greater openness to instructional feedback. Teachers in such environments reported feeling more supported in experimenting

with innovative teaching approaches, reinforcing that professional collaboration serves as a practical channel through which leadership is operationalized.

The findings provide empirical support for contemporary educational leadership theories emphasizing the indirect nature of leadership influence. While earlier models often focused on direct principal supervision as the primary driver of instructional quality, recent scholarship demonstrates that sustainable improvement depends on collective professional learning structures (Hallinger, 2020; Leithwood et al., 2020). The significant mediation effect aligns with the multilevel mediation model proposed by Liu and Hallinger (2022), which suggests that instructional leadership enhances teacher outcomes primarily by shaping professional learning environments. In the Muara Padang context, principals who articulated shared goals and provided consistent professional guidance were more likely to foster high-functioning PLCs, which facilitated reflective dialogue and collaborative problem solving, directly strengthening teacher competence.

The positive association between PLC quality and teacher professional performance also corresponds with meta-analytic findings indicating that collaborative professional communities contribute to improved instructional practices and teacher efficacy (Lomos et al., 2022). When teachers engage in structured collaboration, they are more likely to analyze student learning data, share effective strategies, and refine lesson design, enhancing both technical competence and professional confidence. From the perspective of distributed leadership theory, the results underscore that leadership effectiveness depends on how authority and influence are shared within organizational systems (Printy & Liu, 2021). Effective principals in this study functioned as facilitators of professional learning, with leadership influence extending through structured collaborative forums that institutionalized reflection and collective responsibility.

The rural context of Muara Padang further amplifies the importance of PLCs. In geographically dispersed and resource-constrained districts, access to frequent external professional development programs is often limited. Under such conditions, school-based collaborative structures become critical mechanisms for sustaining teacher growth. The findings highlight that strengthening internal professional communities may represent a cost-effective and sustainable strategy for improving teacher performance in decentralized educational systems.

However, leadership alone is insufficient if collaborative culture is weak. In schools where PLC engagement was limited, the direct influence of principal leadership on teacher performance was comparatively lower, indicating that leadership initiatives must be accompanied by consistent institutional support for structured collaboration. Simply encouraging teamwork without formalizing collaborative routines may not yield significant instructional improvement. Overall, these results reinforce that leadership, collaboration, and professional performance are dynamically interconnected, providing a nuanced understanding of how school leadership operates within complex educational environments.

4. CONCLUSION

This study concluded that school principal leadership significantly influenced teacher professional performance in Muara Padang District. The results confirmed that principals who demonstrated strong instructional and transformational leadership practices contributed positively to the professional competence of teachers.

More critically, Professional Learning Communities functioned as a substantial mediating mechanism in this relationship. The findings revealed that leadership effects were amplified when principals cultivated structured and sustained collaborative professional

environments. Through shared vision, reflective dialogue, and collective inquiry, PLCs translated leadership intentions into tangible improvements in instructional practice.

These findings carry important practical implications. Educational policymakers should prioritize strengthening principal leadership capacity in facilitating professional collaboration rather than focusing exclusively on external training programs. Schools should institutionalize PLC routines as part of their organizational culture to ensure continuous teacher development.

Future research may examine additional contextual variables, such as school size, resource allocation, or teacher experience, that may moderate the leadership–PLC–performance relationship. Longitudinal studies are also recommended to explore how collaborative professional cultures evolve over time and influence sustained instructional improvement.

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