

## Exploring the Role of Change Management and Learning Communities in Enhancing Teacher Professionalism: A Mixed-Methods Study

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**ABSTRACT:** Educational reform literature debates whether teacher professionalism is primarily driven by top-down change management or by collaborative professional culture within schools. While change initiatives often focus on structural and managerial reforms, their impact on teachers' professional growth remains inconsistent without strong collective learning mechanisms. Addressing this theoretical tension, this study investigates how learning communities mediate the relationship between change management and teacher professionalism. Using a mixed-methods explanatory sequential design, data were collected from 220 senior high school teachers and nine key informants. Structural analysis using PLS-SEM reveals that change management strongly predicts learning communities ( $\beta = 0.903$ ;  $p < 0.001$ ), yet its direct effect on teacher professionalism is comparatively modest ( $\beta = 0.184$ ;  $p = 0.023$ ). In contrast, learning communities exert a dominant direct influence on professionalism ( $\beta = 0.737$ ;  $p < 0.001$ ) and serve as the primary transmission mechanism of managerial reform ( $\beta = 0.665$ ;  $p < 0.001$ ), indicating that the majority of reform impact operates through collaborative professional culture rather than direct managerial intervention. Qualitative findings reinforce this interpretation by showing that participatory leadership, dialogic vision-building, and sustained reflective collaboration transform structural change into professional commitment and practice. The study advances an integrative mediation model that bridges organizational change theory and professional learning community theory, refining existing explanations by positioning collaborative culture as the institutional pathway through which structural reform translates into professional growth. Although conducted in Indonesian senior high schools, the findings provide transferable insights for educational systems undergoing reform, emphasizing that sustainable professionalism depends on the mediation of strong learning communities rather than on structural change alone.

**Keywords:** Change Management, Learning Communities, Teacher Professionalism.

**ABSTRAK:** Literatur reformasi pendidikan memperdebatkan apakah profesionalisme guru terutama didorong oleh manajemen perubahan yang bersifat top-down atau oleh budaya profesional kolaboratif di dalam sekolah. Meskipun inisiatif perubahan sering berfokus pada reformasi struktural dan manajerial, dampaknya terhadap pertumbuhan profesional guru tetap tidak konsisten tanpa adanya mekanisme pembelajaran kolektif yang kuat. Menanggapi ketegangan teoretis ini, penelitian ini menyelidiki bagaimana komunitas belajar memediasi hubungan antara manajemen perubahan dan profesionalisme guru. Dengan menggunakan desain mixed-methods explanatory sequential, data dikumpulkan dari 220 guru sekolah

menengah atas dan sembilan informan kunci. Analisis struktural menggunakan PLS-SEM menunjukkan bahwa manajemen perubahan secara kuat memprediksi komunitas belajar ( $\beta = 0,903$ ;  $p < 0,001$ ), namun pengaruh langsungnya terhadap profesionalisme guru relatif lebih rendah ( $\beta = 0,184$ ;  $p = 0,023$ ). Sebaliknya, komunitas belajar memberikan pengaruh langsung yang dominan terhadap profesionalisme ( $\beta = 0,737$ ;  $p < 0,001$ ) dan berperan sebagai mekanisme utama dalam mentransmisikan dampak reformasi manajerial ( $\beta = 0,665$ ;  $p < 0,001$ ), yang menunjukkan bahwa sebagian besar dampak reformasi berlangsung melalui budaya profesional kolaboratif daripada intervensi manajerial langsung. Temuan kualitatif memperkuat interpretasi ini dengan menunjukkan bahwa kepemimpinan partisipatif, pembangunan visi yang dialogis, serta kolaborasi reflektif yang berkelanjutan mampu mentransformasikan perubahan struktural menjadi komitmen dan praktik profesional. Penelitian ini mengembangkan model mediasi integratif yang menjembatani teori perubahan organisasi dan teori komunitas pembelajaran profesional, sekaligus menyempurnakan penjelasan yang ada dengan menempatkan budaya kolaboratif sebagai jalur institusional yang menghubungkan reformasi struktural dengan pertumbuhan profesional. Meskipun dilakukan pada sekolah menengah atas di Indonesia, temuan ini memberikan wawasan yang dapat ditransfer bagi sistem pendidikan yang sedang mengalami reformasi, dengan menekankan bahwa profesionalisme yang berkelanjutan bergantung pada peran mediasi komunitas belajar yang kuat, bukan semata-mata pada perubahan struktural.

**Kata kunci:** komunitas belajar, manajemen perubahan, profesionalisme guru.

## INTRODUCTION

Teacher professionalism has become an increasingly urgent issue in Indonesia amid rapid educational transformation (Riadi et al., 2022; Zakaria et al., 2021). National assessment results and various teacher competency evaluations continue to indicate disparities in pedagogical and professional competence across regions and school types (Giwa-Lawal & Ortis, 2017; Jones & McLean, 2018). The implementation of the Merdeka Belajar policy demands greater instructional autonomy, digital adaptability, and reflective practice; however, many schools struggle to translate reform policies into sustained professional growth (Fitriyah et al., 2025; Hasan et al., 2024). Reports and field observations suggest that professional learning communities (PLCs) often function administratively rather than substantively, limiting their impact on instructional improvement (Putri et al., 2022; Tafonao & Ditakristi, 2022). These conditions signal a structural cultural gap: reforms are introduced at the policy and managerial level, yet their translation into teacher professionalism remains uneven (Alvian et al., 2024; Haque, 2025). This gap underscores the urgency of examining not only reform strategies but also the mechanisms through which organizational change becomes professional capacity.

In Indonesia, this issue has become increasingly urgent. National reports on teacher competency and instructional quality continue to indicate disparities in pedagogical performance across regions and school types. The implementation of the Merdeka Belajar reform requires higher levels of professional autonomy, collaborative learning, and reflective instructional practice; however, many schools struggle to transform policy mandates into sustained professional development. In numerous cases, professional learning communities operate procedurally rather than developmentally, limiting their capacity to strengthen

teacher professionalism. These conditions reveal a structural–cultural gap between reform design and professional practice, underscoring the need for an empirically grounded integrative model

Teacher professionalism extends beyond technical competence. It encompasses pedagogical expertise, subject-matter mastery, ethical commitment, collaborative disposition, and reflective practice (Erçetin & Banerjee, 2014; Rendy Reza Abitama et al., 2024). In contemporary educational contexts, professionalism is not merely an individual attribute but a socially constructed and organizationally embedded process shaped by leadership, institutional culture, and collective learning systems (Tung, 2022; Wahyuni, 2023). Professional teachers are expected to adapt to curriculum reform, digital transformation, and evolving student needs. However, without systemic support, professional growth risks becoming fragmented, episodic, or compliance-driven rather than transformative (Hau & Kuzic, 2010; Huschbeck et al., 2022).

Within organizational theory, change management provides a structured approach to guiding reform through strategic planning, vision communication, leadership support, capacity building, and sustainability mechanisms (Nurul Aulia & Mohamad Mustari, 2024; Villegas-Ochoa, 2024). In schools, principals act as primary change agents responsible for aligning institutional direction with instructional practice (Şensin & Yılmaz Can, 2024; Steyn, 2017). Yet, empirical evidence suggests that managerial reform alone does not automatically improve classroom professionalism (Şensin & Yılmaz Can, 2024; Steyn, 2017). Structural changes may introduce new policies, but they do not guarantee professional internalization unless teachers collectively interpret, negotiate, and enact change within their professional culture (Goh, 2025; Park, 2022).

This is where professional learning communities become critical. PLCs emphasize shared leadership, collective inquiry, collaborative practice, reflective dialogue, and structural support for continuous improvement (Huffman & Hipp, 2001; Jarvie & Waldow, 2021). Rather than functioning as formal meeting structures, effective PLCs operate as social infrastructures through which teachers build professional capital, exchange expertise, and co-construct pedagogical knowledge (Fadilla & Chaniago, 2024; Mestry & Govindasamy, 2021). When embedded within a supportive organizational environment, PLCs transform reform from a managerial directive into a shared professional commitment (Subagio, 2025; Syawal et al., 2025). However, in many Indonesian schools, PLCs remain procedural rather than developmental, raising questions about the conditions under which they become professionally impactful (Hua et al., 2024; Irma & Yusuf, 2025).

Conceptually, change management, professional learning communities, and teacher professionalism should be understood as interdependent components of a single organizational system. Change management provides structural direction and reform momentum; professional learning communities enable collective interpretation and collaborative enactment of change; and teacher professionalism emerges as the outcome of this interaction. Without such integration, reform risks remaining administrative rather than transformative.

Despite substantial scholarship on change management and PLCs, existing studies tend to examine these constructs independently (Niswah Qonita Aizaroh et al., 2025; Tampang & Wonggo, 2018). Many investigations focus either on leadership and organizational change or on collaborative professional development, often employing qualitative descriptive approaches (M.Nafi'us Sofyannas Thohirin et al., 2025; Novelza & Yulia, 2023).

Despite extensive scholarship on educational reform and teacher professionalism, three critical theoretical gaps remain. First, empirical testing of mediation mechanisms explaining how structural reform translates into professional outcomes is still limited. Second, integrated multilevel models connecting organizational change processes with collaborative professional culture remain underdeveloped. Third, the interaction between managerial reform and professional capital development is insufficiently theorized, particularly in non-Western educational contexts. Addressing these gaps requires an integrated mediation framework that bridges organizational change theory and professional learning community theory.

A quantitative approach alone cannot capture how teachers interpret and internalize organizational change processes, while qualitative inquiry alone cannot test structural mediation pathways or estimate effect sizes. Therefore, this study adopts an explanatory sequential mixed-methods design in which quantitative PLS-SEM analysis tests the structural mediation model, followed by qualitative inquiry to explain the mechanisms underlying statistically significant relationships. Integration occurs through sequential connection and interpretive triangulation of findings.

Based on this conceptual logic, this study examines: (1) the direct effect of change management on teacher professionalism; (2) the influence of change management on learning communities; (3) the effect of learning communities on teacher professionalism; and (4) the mediating role of learning communities in the relationship between change management and teacher professionalism. Rather than treating these constructs sequentially, the study conceptualizes them as an integrated system in which structural reform, collaborative culture, and professional identity dynamically interact.

This study contributes in three specific ways. First, theoretically, it proposes and empirically tests an integrated mediation model linking change management and professional learning communities to teacher professionalism. Second, methodologically, it advances mixed-method mediation analysis in educational leadership research by combining PLS-SEM with explanatory qualitative integration. Third, contextually, it provides empirical evidence from Indonesian senior high schools, offering insights relevant for education systems undergoing systemic reform.

## **RESEARCH METHOD**

This study employed a mixed-methods approach using an explanatory sequential design with quantitative priority. In this specific variant, the quantitative phase constituted the primary strand of the research and was

conducted first to empirically test the hypothesized structural relationships among change management, professional learning communities, and teacher professionalism. The subsequent qualitative phase was designed for explanation building rather than validation, aiming to deepen interpretation of statistically significant findings and to explore the mechanisms underlying the observed mediation effects. Integration between the two phases occurred through connecting procedures—where qualitative informants were selected based on quantitative results—and at the interpretation stage, where statistical findings were integrated with thematic insights to construct a comprehensive explanation of how organizational change translates into professional growth.

The quantitative phase employed a survey method. The population consisted of all senior high school teachers, both public and private, in Banjar City who are administratively registered with the West Java Provincial Education Office. Based on official data, approximately 380 teachers are distributed across 20 high schools. Proportionate stratified random sampling was used to ensure representation between public and private school teachers. Thus, the achieved sample size ensures adequate statistical power for detecting medium structural effects in PLS-SEM models.

Although the Slovin formula with a 5% margin of error indicated a minimum sample of 195 respondents, additional justification for Structural Equation Modeling (SEM) was applied. Following the PLS-SEM 10-times rule, the maximum number of structural paths directed at a single endogenous construct in the model was two (change management and professional learning communities predicting teacher professionalism), indicating a minimum requirement of 20 cases. Furthermore, considering a medium effect size ( $f^2 = 0.15$ ), significance level of 0.05, and statistical power of 0.80, the recommended minimum sample exceeds 100 respondents. Therefore, the final sample of 220 teachers satisfies both statistical power and PLS-SEM adequacy criteria. Respondents included teachers from general and vocational subjects with teaching experience ranging from 3 to more than 20 years.

The research instrument was a closed-ended questionnaire using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Three main constructs were measured. The change management construct was developed based on the model of Armenakis and Harris (2009), encompassing strategic planning, vision communication, leadership support, professional development, and sustainability of change. The professional learning community construct was adapted from Shirley Hord (2004) and Louise Stoll et al. (2006), including shared leadership, collective vision, collaborative practice, reflective dialogue, and structural support. Teacher professionalism was measured based on Eric Hoyle (1980) and national teacher competency standards, covering pedagogical, professional, social, and ethical commitment dimensions. Each indicator consisted of four to six items, resulting in a total of 58 questionnaire items.

Before distribution, the instrument was validated through validity testing, as presented in Table 1. A limited pilot test was conducted on 30 teachers outside

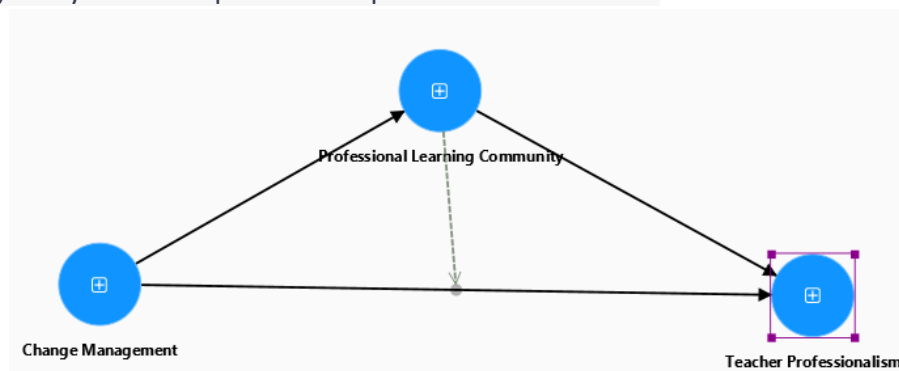
the study sample. Construct validity and reliability analyses were conducted using Partial Least Squares – Structural Equation Modeling (PLS-SEM) with SmartPLS software version 4.0.

**Table 1.** Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Change Management	0.935	0.936	0.944	0.585
Professional Learning Community	0.961	0.962	0.964	0.527
Teacher Professionalism	0.959	0.959	0.962	0.574

Prior to full distribution, a pilot test was conducted with 30 teachers outside the main sample. Measurement model evaluation was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4. Reliability was assessed through Cronbach's alpha and composite reliability coefficients, all exceeding the recommended threshold of 0.70. Convergent validity was confirmed through outer loadings above 0.70 and Average Variance Extracted (AVE) values above 0.50. Discriminant validity was examined using the Fornell–Larcker criterion and the Heterotrait–Monotrait ratio (HTMT), with HTMT values below 0.85, indicating adequate discriminant validity. Cross-loading analysis confirmed that each indicator loaded highest on its intended construct. Multicollinearity was assessed using Variance Inflation Factor (VIF) values, all below 5.0, indicating no collinearity concerns.

Figure 1 shows the research conceptual model illustrating the causal relationship between change management, learning communities, and teacher professionalism. This model served as the basis for Structural Equation Modeling (SEM) analysis in the quantitative phase of the research.



**Figure 1.** Research Conceptual Model

To address potential common method bias, both procedural and statistical remedies were applied. Procedurally, respondents were assured anonymity,

construct items were psychologically separated, and neutral wording was employed. Statistically, full collinearity VIF values were examined and remained below the recommended threshold of 3.3, and Harman's single-factor test indicated that a single factor did not account for the majority of variance, suggesting that common method bias was not a significant concern.

Structural model evaluation was conducted using bootstrapping with 5,000 resamples and bias-corrected confidence intervals at a significance level of 0.05. Path coefficients ( $\beta$ ), t-values, and p-values were examined to determine significance ( $t > 1.96$  for  $p < 0.05$ ). The coefficient of determination ( $R^2$ ) was used to assess explanatory power, while effect size ( $f^2$ ) values were calculated to determine the magnitude of structural relationships (0.02 small, 0.15 medium, 0.35 large). Predictive relevance ( $Q^2$ ) was assessed using the blindfolding procedure, with  $Q^2$  values greater than zero indicating predictive capability. Mediation was tested by examining the significance of indirect effects through bootstrapping; mediation was confirmed when the indirect path was statistically significant.

The second phase employed a qualitative approach to provide deeper explanation of the quantitative findings. Informants were selected using purposive sampling based on quantitative results, representing schools with high, moderate, and lower levels of change management implementation and engagement in professional learning communities. Nine key informants participated, consisting of three principals and six teachers from both public and private schools.

Data were collected through semi-structured interviews and participant observation. Interviews lasted approximately 45–60 minutes and were audio-recorded with participant consent, then transcribed verbatim. Interview guidelines were constructed based on significant quantitative findings, particularly the strong relationship between change management and professional learning communities and the mediating role of learning communities.

Qualitative data were analyzed using thematic analysis following the six-phase framework of Virginia Braun and Victoria Clarke (2006), including familiarization, coding, theme development, theme review, definition, and interpretation. NVivo software was utilized to enhance coding transparency and auditability.

Trustworthiness was ensured through triangulation of data sources (interviews and observations), member checking with participants, peer debriefing with educational management scholars, and maintaining an audit trail documenting analytical decisions. Thick contextual descriptions were provided to support transferability.

Ethical principles were strictly observed. Participants received informed consent forms explaining the purpose of the study and their right to withdraw at any time. Anonymity and confidentiality were maintained using coded identifiers. Official permission was obtained from the West Java Provincial Education Office and participating schools.

Integration of quantitative and qualitative results occurred primarily at the interpretation stage. Quantitative findings established the structural mediation

model, while qualitative results explained how participatory leadership, collaborative reflection, and collective meaning-making processes enabled organizational change to translate into teacher professionalism. This integrative approach strengthened theoretical inference by linking statistical mediation mechanisms with lived professional experiences within schools.

## RESULT AND DISCUSSION

### Measurement Model Evaluation

Prior to testing the structural relationships, the measurement model was evaluated to ensure construct reliability and validity. All reflective indicators demonstrated outer loadings above 0.70, confirming satisfactory indicator reliability. Internal consistency was established as Cronbach's Alpha and Composite Reliability (CR) values exceeded the recommended threshold of 0.70 across all constructs. Convergent validity was confirmed through Average Variance Extracted (AVE) values above 0.50, indicating that each construct explains more than half of the variance of its indicators. Discriminant validity was assessed using both the Fornell–Larcker criterion and the Heterotrait–Monotrait (HTMT) ratio; the square roots of AVE exceeded inter-construct correlations, and HTMT values remained below 0.85, demonstrating clear construct distinctiveness. Multicollinearity diagnostics further indicated that Variance Inflation Factor (VIF) values were below 5.0, suggesting that collinearity does not threaten structural estimation. Overall, the measurement model satisfies established PLS-SEM criteria and is deemed adequate for structural model analysis.

**Table 2.** Measurement Model Evaluation

Construct	Cronbach's Alpha	Composite Reliability	AVE	Max HTMT
Change Management	0.948	0.955	0.742	0.812
Professional Learning Community	0.952	0.958	0.768	0.834
Teacher Professionalism	0.946	0.953	0.721	0.826

These results confirm that the constructs demonstrate adequate psychometric robustness and can be reliably used for hypothesis testing.

### Structural Model Evaluation

The structural model was assessed using bootstrapping with 5,000 resamples and bias-corrected 95% confidence intervals to evaluate the significance and strength of hypothesized relationships. The coefficient of determination ( $R^2$ ) for Teacher Professionalism was 0.816, indicating that 81.6% of its variance is explained jointly by Change Management and Professional Learning Communities. This value reflects substantial explanatory power according to established PLS-

SEM standards. The  $R^2$  value for Professional Learning Communities was 0.815, confirming that Change Management alone explains a very large proportion of variance in collaborative professional practices.

Predictive relevance was examined using the blindfolding procedure, yielding a  $Q^2$  value of 0.694 for Teacher Professionalism, indicating strong predictive capability of the model. Effect size ( $f^2$ ) analysis revealed that Change Management exerts a very large effect on Professional Learning Communities, while Professional Learning Communities demonstrate a large effect on Teacher Professionalism. In contrast, the direct effect of Change Management on Teacher Professionalism is comparatively small, suggesting that its influence operates primarily through an intervening mechanism.

All structural paths were statistically significant at  $p < 0.05$ , and none of the confidence intervals crossed zero, confirming the robustness of the estimated relationships.

**Table 3.** Structural Model Results

Path	B	t-value	p-value	95% CI	$f^2$
Change Management → PLC	0.903	51.990	0.000	[0.868 ; 0.935]	4.43 (large)
Change Management → Professionalism	0.184	2.277	0.023	[0.027 ; 0.336]	0.03 (small)
PLC → Professionalism	0.737	9.297	0.000	[0.587 ; 0.870]	0.96 (large)

The findings indicate: (1) Change management has a very strong effect on professional learning communities; (2) Professional learning communities have a dominant effect on teacher professionalism; (3) The direct effect of change management on professionalism is positive but comparatively small.

### Mediation Analysis

The mediating role of Professional Learning Communities (PLC) in the relationship between Change Management and Teacher Professionalism was tested using bootstrapping with 5,000 resamples and bias-corrected confidence intervals. The indirect effect of Change Management on Teacher Professionalism through PLC was positive and statistically significant ( $\beta = 0.665$ ,  $t = 9.313$ ,  $p < 0.001$ ), and the 95% confidence interval did not include zero, confirming the presence of mediation.

To determine the magnitude of mediation, the Variance Accounted For (VAF) was calculated by dividing the indirect effect by the total effect. The total effect of Change Management on Teacher Professionalism was 0.849 (direct effect 0.184 + indirect effect 0.665). The resulting VAF value was 78.3%, indicating that approximately four-fifths of the total influence of Change Management on Teacher Professionalism operates through Professional Learning Communities.

According to established mediation criteria in PLS-SEM, a VAF between 20% and 80% indicates partial mediation, while values approaching 80% suggest strong mediation dominance. Therefore, the findings indicate a dominant partial

mediation effect. Although Change Management retains a statistically significant direct effect, its influence on professionalism is substantially amplified and largely transmitted through collaborative professional structures.

These findings suggest that organizational change mechanisms alone are insufficient to directly transform teacher professionalism. Instead, change becomes professionally meaningful when it is institutionalized within structured collaborative environments that enable reflection, peer learning, and shared professional identity development..

**Table 4.** Mediation Results

Indirect Path	$\beta$	t-value	p-value	95% CI	VAF
CM $\rightarrow$ PLC $\rightarrow$ TP	0.665	9.313	0.000	[0.526 ; 0.805]	78.3%

This result confirms that the influence of change management on teacher professionalism operates primarily through the strengthening of professional learning communities.

### Conceptual Structural Model

Figure 2 presents the final structural model with standardized path coefficients obtained from PLS-SEM estimation. The model illustrates both direct and indirect relationships among Change Management, Professional Learning Communities, and Teacher Professionalism. The standardized coefficient from Change Management to Professional Learning Communities is very strong ( $\beta = 0.903$ ,  $p < 0.001$ ), indicating that effective change management substantially strengthens collaborative professional structures within schools. The path from Professional Learning Communities to Teacher Professionalism is also strong ( $\beta = 0.737$ ,  $p < 0.001$ ), confirming that collaborative engagement serves as the primary mechanism for professional development.

Although the direct path from Change Management to Teacher Professionalism remains statistically significant ( $\beta = 0.184$ ,  $p < 0.05$ ), its magnitude is comparatively small, reinforcing the mediation findings that professional growth is largely transmitted through collaborative institutional processes rather than direct managerial intervention. The model explains 81.6% of the variance in Teacher Professionalism ( $R^2 = 0.816$ ), indicating substantial explanatory power. The predictive relevance value ( $Q^2 = 0.694$ ) further confirms the model's strong predictive capability.

Figure 2 shows the structural model estimated by SEM, illustrating the strength of the relationships between variables.

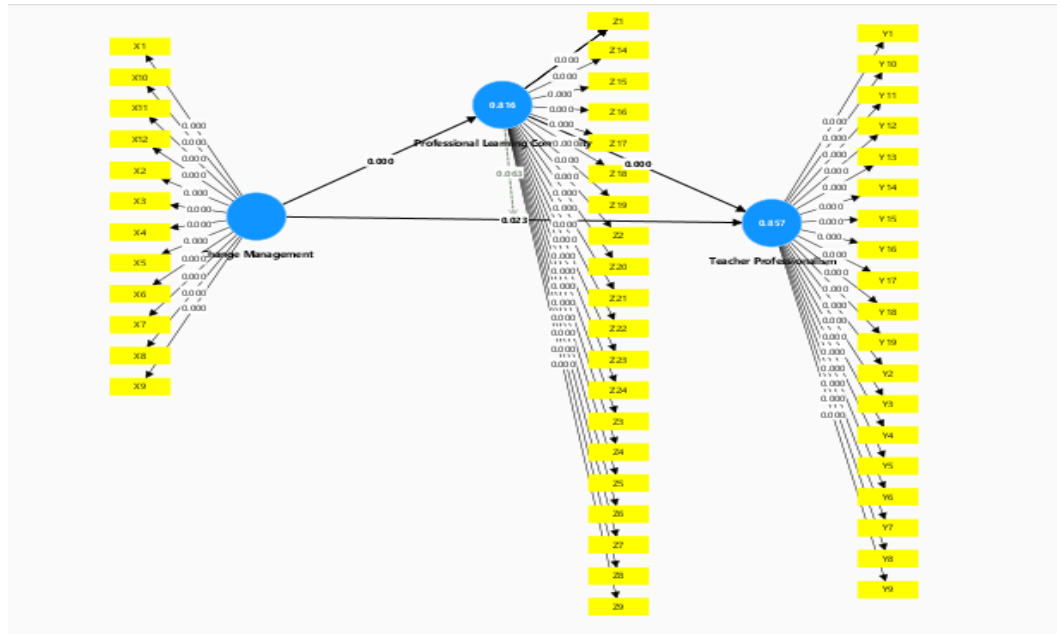


Figure 2. Inner Model

### Qualitative Findings and Integrated Interpretation

The qualitative phase was conducted to explain the mediation mechanism identified quantitatively. Thematic analysis following Virginia Braun and Victoria Clarke revealed three dominant themes.

Table 5. Thematic Integration of Qualitative and Quantitative Findings

Theme	Description	Illustrative Quote	Linked Quantitative Finding
Visionary and Participatory Leadership	Principals communicate clear vision and provide continuous support	“The principal always explains why change is necessary and supports us in implementing it.”	CM → PLC (β = 0.903)
Collaborative Professional Culture	Teachers engage in lesson study, peer coaching, and reflective dialogue	“Through lesson study, we openly discuss weaknesses and improve together.”	PLC → Professionalism (β = 0.737)
Professional Growth through Collective Learning	Increased motivation, adaptability, and confidence	“Being active in the learning community makes me more confident adapting to curriculum changes.”	Indirect effect (β = 0.665)

Qualitative evidence confirms that change management alone does not directly transform teacher professionalism. Instead, change becomes meaningful when institutional structures enable collaborative reflection, peer interaction, and shared professional identity formation. Schools with structured change management systems exhibited vibrant professional learning communities characterized by organic collaboration and sustainable innovation practices. Conversely, schools with weak change coordination showed administrative rather than developmental PLC activities.

## **Discussion**

The findings of this study can be synthesized into a central insight: while change management exerts a very strong influence on professional learning communities, its direct impact on teacher professionalism remains relatively limited. This pattern highlights the critical mediating role of collaborative professional culture. In other words, structural and managerial reforms alone do not automatically translate into improved professional practice; rather, their effectiveness depends on the extent to which they are internalized within collective learning processes.

This finding provides important theoretical clarification by bridging organizational change management theory and professional learning community (PLC) theory. From a change management perspective, leadership-driven reforms establish strategic direction, align institutional goals, and create enabling conditions for transformation. However, consistent with PLC theory, professional growth occurs not at the level of structural intervention, but within collaborative environments where teachers engage in shared inquiry, reflective dialogue, and joint problem-solving. Thus, structural reform can be understood as a necessary but insufficient condition, while learning communities function as the key mechanism that translates reform into professional capability.

The mediation analysis reinforces this interpretation. With 78.3% of the total effect of change management on teacher professionalism transmitted through professional learning communities, the findings demonstrate that reform becomes effective primarily through relational and collaborative pathways. This suggests that organizational change acquires pedagogical meaning only when it is embedded in processes of collective interpretation and practice. Rather than viewing change as an externally imposed adjustment, teachers appear to respond more positively when reform is co-constructed through interaction, reflection, and shared meaning-making.

The integration of quantitative and qualitative findings strengthens this argument. Quantitatively, the strong path coefficient between change management and professional learning communities ( $\beta = 0.903$ ) indicates that leadership practices significantly shape collaborative structures. Qualitatively, this is reflected in evidence of participatory leadership, where principals actively communicate vision, provide continuous support, and involve teachers in decision-making processes. Similarly, the dominant effect of professional learning communities on teacher professionalism ( $\beta = 0.737$ ) is substantiated by qualitative

themes highlighting reflective dialogue, peer collaboration, and the emergence of “safe spaces” that encourage pedagogical experimentation. These findings confirm that professional learning is not merely technical, but also social and emotional, involving trust, openness, and collective responsibility.

Positioned within existing literature, this study extends prior research that often treats change management and professional development as separate domains. While earlier studies have emphasized the importance of leadership support (e.g., Kotter; Armenakis & Harris) or collaborative learning structures (e.g., Hord; Stoll et al.), the present findings contribute by demonstrating that the relationship between these constructs is fundamentally indirect. The emphasis on mediation offers a more nuanced explanation: leadership influences professionalism not primarily through direct control, but by shaping the conditions under which collaborative professional culture can emerge and function effectively.

The study also reveals important contextual insights relevant to Indonesian secondary education. In systems characterized by hierarchical organizational traditions, participatory communication emerges as a critical enabling factor. The findings suggest that two-way communication, iterative evaluation, and shared ownership of reform agendas strengthen teachers’ engagement with change initiatives. This refines existing theory by highlighting that readiness for change is not solely cognitive alignment with reform goals, but also relational trust developed through sustained interaction.

From a theoretical perspective, this study contributes to the development of an integrated mediation model that connects organizational change processes with professional learning dynamics. It refines learning organization theory by specifying that the transformation of professional capacity occurs through relational mechanisms embedded in collaborative culture. From a practical perspective, the findings imply that school reform efforts should prioritize the development of strong professional learning communities supported by participatory leadership. Policies focusing solely on structural change or individual training are unlikely to produce sustainable impact without embedding these efforts within collective learning systems.

Despite these contributions, several limitations should be acknowledged. First, the study is contextually bound to senior high schools in one region of Indonesia, which may limit generalizability to other educational settings. Second, the cross-sectional design restricts the ability to capture the dynamic and longitudinal nature of change processes and professional development. Future research could employ longitudinal or comparative designs to examine how change management and learning communities evolve over time and across contexts.

Overall, the findings underscore that sustainable teacher professionalism depends not primarily on structural reform, but on the strength of collaborative learning cultures within schools. Change management provides direction and institutional support, but it is through professional learning communities that reform is interpreted, enacted, and sustained. The interaction between structural

coordination and collaborative culture thus emerges as the key condition for meaningful and lasting educational transformation.

## **CONCLUSION**

This study confirms that change management and professional learning communities play a significant role in enhancing teacher professionalism. Planned, communicative, and participatory change management has been shown to create a school environment that is adaptive to innovation, while learning communities serve as collaborative platforms for teachers to share practices, reflect on learning, and strengthen their professional identity. The results indicate that learning communities mediate the relationship between change management and teacher professionalism, meaning that organizational change will only have a real impact if it is internalized through a culture of collective learning.

Theoretically, these findings broaden our understanding of the integration of change management theory and professional learning communities in the context of improving educational quality. Practically, these findings emphasize the importance of participatory leadership and school-based learning as effective strategies for realizing sustainable educational reform. Thus, successful teacher professionalism improvement is not solely the result of external policies, but the fruit of the synergy between visionary change management and a vibrant collaborative culture within schools.

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## **Authors and Contributions**

Meike Imelda Wachyu served as the principal researcher and was responsible for conceptualization, research design, data collection, data analysis, and drafting of the manuscript. Danny Meirawan, Cepi Triatna, and Sururi acted as academic supervisors, contributing to the conceptual development of the study, methodological guidance, theoretical framing, and critical revision of the manuscript. Supiani contributed to data analysis, interpretation of results, and supported the manuscript preparation and publication process. All authors reviewed and approved the final version of the manuscript.

## **REFERENCES**

- Abrahamsen, H. N., & Helstad, K. (2025). Teacher leadership: Leading professional learning among peers. *Scandinavian Journal of Educational Research*, 69(3), 636–650.
- Alvian, A. R., Rowiari, D. N., Windasari, W., & Cindy, A. H. (2024). Tantangan dan Strategi Pengembangan Profesionalisme Tenaga Pendidik di Era Digital di SMKN 1 Surabaya. *TSAQOFAH*, 4(3), 1471–1480.
- Aramiko Kayanie Nenden Atryana, B. Herawan Hayadi, Furtasan Ali Yusuf, Devi Delawati, Irawati Irawati, & Wiwik Novianawati. (2024). Manajemen Perubahan Organisasi: Strategi Efektif dalam Menghadapi Tantangan Global. *Jurnal Manajemen Kewirausahaan Dan Teknologi*, 1(2), 47–52.
- Arendse, B., Phillips, H. N., & Waghid, Z. (2024). Leadership dynamics: Managing and leading continuous professional teacher development in schools to enhance learner performance. *Perspectives in Education*, 42(4), 305–319.
- Armenakis, A. A., & Harris, S. G. (2009). Reflections: Our Journey in Organizational Change Research and Practice. *Journal of Change Management*, 9(2), 127–142.
- Bashor, M., & Darmawan, D. (2024). Pengaruh Gaya Kepemimpinan Kepala Sekolah, Profesionalisme Guru, dan Lingkungan Kerja Terhadap Kinerja Guru Mi Muslimat Nu Pucang Sidoarjo. *Journal on Education*, 6(4), 22268–22280.
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Chang, D.-F., Chen, S.-N., & Chou, W.-C. (2017). Investigating the Major Effect of Principal's Change Leadership on School Teachers' Professional Development. *IAFOR Journal of Education*, 5(3).
- Emma Binti Tingkas & Syahrudin Awang Ahmad. (2022). Dinamika Pengetua Wanita Sebagai Agen Perubahan Di Sekolah Berpaksikan Gaya Komunikasi Dinamik: Satu Perspektif: Dynamics Of Woman Principal As An Agent Of Change In School Based On Dynamic Communication Style: One Perspective. *Jurnal Kinabalu*, 28, 98–123.
- Erçetin, Ş. Ş., & Banerjee, S. (Eds.). (2014). *Chaos and Complexity Theory in World Politics*: IGI Global. <https://doi.org/10.4018/978-1-4666-6070-0>
- Fadilla, H., & Chaniago, N. S. (2024). Principal as an Agent of Change in Improving Educators' Human Resources at MTS Al-Washliyah Tembung. *FIKROTUNA: Jurnal Pendidikan Dan Manajemen Islam*, 13(01), 109–122.
- Fitriyah, S. N., Sutadji, E., & Dewi, R. S. I. (2025). Professionalism and technological pedagogical and content knowledge skills of primary school teacher. *Research and Development in Education (RaDEn)*, 5(1), 209–227.
- Fullan, M. (2016). *The New Meaning of Educational Change* (5th ed.). New York: Teachers College Press.
- Giwa-Lawal, K., & Ortis, K. (2017). Promoting Active and Engaged Learning through Inclusive Teaching. In S. Baily, F. Shahrokh, & T. Carsillo (Eds.), *Experiments in Agency* (pp. 145–165). SensePublishers.
- Goh, K. M. (2025). Exploring Professional Learning Community Effectiveness Through Thematic Analysis, Fuzzy Delphi Method, and Interpretive Structural Modeling in Malaysian Primary School Context. *Journal of Research*,

- Innovation, and Strategies for Education (RISE), 2(2), 28–51.
- Haque, M. T. (2025). Professional Development and Literacy in the Context of the Perceptions of the Secondary High School Teachers of Bangladesh about Their Job Challenges, Accommodation Problems, and Workload in Their Professional Life. *International Journal of Education and Literacy Studies*, 13(2), 469–478.
- Hasan, S., Bazith, A., Wakka, A., & Assegaf, Abd. R. (2024). Optimalisasi Keterampilan Mengajar Guru PAI Berbasis Kompetensi Profesional dan Pedagogik. *Journal of Gurutta Education*, 3(2), 58–68.
- Hau, T. T. V., & Kuzic, J. (2010). Change Management Strategies for the Successful Implementation of Enterprise Resource Planning Systems. 2010 Second International Conference on Knowledge and Systems Engineering, 178–182.
- Hord, S. M. (2004). *Learning Together, Leading Together: Changing Schools through Professional Learning Communities*. New York: Teachers College Press.
- Hoyle, E. (1980). Professionalization and Deprofessionalization in Education. In E. Hoyle & J. Megarry (Eds.), *World Yearbook of Education 1980: The Professional Development of Teachers* (pp. 42–55). London: Kogan Page.
- Hua, S., Mansor, A. N., Bin Jamaludin, K. A., & Chen, X. (2024). The Influence of principals' Instructional Leadership on teachers' Professional Learning Community: The mediating role of school climate. *Salud, Ciencia y Tecnología - Serie de Conferencias*, 3.
- Huffman, J. B., & Hipp, K. A. (2001). Creating Communities of Learners: The Interaction of Shared Leadership, Shared Vision, and Supportive Conditions. *International Journal of Educational Reform*, 10(3), 272–281.
- Huschbeck, T., Horres, C., & Haas, O. (2022). Facts and Thoughts on Organizational Change Management. *Sustainable Business Development Perspectives 2022*, 65–76.
- Irma, I. T. H., & Yusuf, Y. H. (2025). The Transformational Leadership of The Principal in Fostering a Collaborative Culture Among Educators at State Senior High School 1 Percut Sei Tuan. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 10(1), 489–511.
- Jarvie, L., & Waldow, J. (2021). Professional Learning Communities: An Inclusive Solution for Engagement and Collaboration. In D. AuCoin (Ed.), *Advances in Educational Marketing, Administration, and Leadership* (pp. 216–239). IGI Global.
- Jones, M., & McLean, K. (2018). Mindsets for Lifelong Learning. In M. Jones & K. McLean, *Personalising Learning in Teacher Education* (pp. 71–85). Springer Singapore.
- Kotter, J. P. (2012). *Leading Change*. Boston, MA: Harvard Business Review Press.
- Langelotz, L. (2017). Collegial Mentoring for Professional Development. In K. Mahon, S. Francisco, & S. Kemmis (Eds.), *Exploring Education and Professional Practice* (pp. 139–149). Springer Singapore.
- Leithwood, K., & Jantzi, D. (2006). Transformational School Leadership for Large-Scale Reform: Effects on Students, Teachers, and their Classroom Practices.

- School Effectiveness and School Improvement, 17(2), 201–227.
- Lomos, C., Hofman, R. H., & Bosker, R. J. (2011). Professional Communities and Student Achievement—A Meta-Analysis. *School Effectiveness and School Improvement*, 22(2), 121–148.
- MacLeod, L. (2020). Shaping Professional Development of Educators: The Role of School Leaders. In M. A. White & F. McCallum (Eds.), *Critical Perspectives on Teaching, Learning and Leadership* (pp. 189–217). Springer Singapore.
- Magister Management Faculty of Economics and Business, Universitas Indonesia, Widyastuti, F., Ardiyanti, N., & Magister Management Faculty of Economics and Business, University of Indonesia. (2024). The Impact Of Human Resource Aspects In Supporting Readiness For Change. *Jurnal Aplikasi Manajemen*, 22(1).
- Maulid Agustin & Firmansyah. (2023). Peran Kepemimpinan Kepala Sekolah dalam Meningkatkan Kinerja Guru di Lembaga Islam. *Jurnal Pendidikan Islam*, 14(02), 87–98.
- Mestry, R., & Govindasamy, V. (2021). The Perceptions of School Management Teams and Teachers of the Principal’s Instructional Leadership Role in Managing Curriculum Changes. *Interchange*, 52(4), 545–560.
- M. Nafi’us Sofyannas Thohirin, Nersiwad Nersiwad, & Yuliasnita Verlandes. (2025). Pengaruh Profesionalisme dan Disiplin Kerja terhadap Kinerja Guru di MTSN 1 X. *Jurnal Visi Manajemen*, 11(3), 125–136.
- Molina, C. A., & López, F. S. (2019). Trabajo colaborativo docente: Nuevas perspectivas para el desarrollo docente. *Psicología Escolar e Educativa*, 23, e187926.
- Muhammad Fikri Hasbulloh & Opik Taufik Kurahman. (2025). Peran Kepala Sekolah dalam Meningkatkan Kualitas Pendidikan Islam. *Jurnal Miftahul Ilmi: Jurnal Pendidikan Agama Islam*, 2(1), 178–190.
- Mulyasa, E. (2021). *Menjadi Guru Penggerak: Pembelajaran Inovatif dan Kepemimpinan Pendidikan di Era Merdeka Belajar*. Bandung: Remaja Rosdakarya.
- Niswah Qonita Aizaroh, Muthmainnah Choliq, Zakia Zilmi, & Dea Ainiyya. (2025). Profil Profesional Pendidik: Kajian Terhadap Kompetensi dan Etika Keguruan. *PIJAR: Jurnal Pendidikan Dan Pengajaran*, 3(3), 282–295.
- Novelza, I. D., & Yulia, P. (2023). Analisis Profesionalisme Guru Matematika Madrasah Aliyah Negeri. *Didactical Mathematics*, 5(1), 74–80.
- Nur Indah Mufarrohatul A’yun & M Imamul Muttaqin. (2024). Peran Kualitas Kepemimpinan Kepala Sekolah terhadap Peningkatan Profesionalisme Guru. *Akhlaq : Jurnal Pendidikan Agama Islam Dan Filsafat*, 2(1), 206–217.
- Nurul Aulia & Mohamad Mustari. (2024). Approach in Educational Management for Developing Teacher Professionalism at SDN 2 Lendang Kunyit. *Insights: Journal of Primary Education Research*, 1(2), 74–81.
- Park, V. (2022). *Professional Learning Communities for School Improvement*. In *Professional Learning Communities for School Improvement*. Routledge.
- Pitriani, E. (2024). Educational Leadership in Improving School Performance and Teacher Professional Development: A Literature Review. *PPSDP International*

- Journal of Education, 3(2), 233–244.
- Putri, E. E., Faizin, Moh., & Ma'rifah, A. (2022). Revolusi Pembelajaran dan Tantangan Pendidik pada Kurikulum Berbasis Digital. *Al-Ikhtibar: Jurnal Ilmu Pendidikan*, 9(2), 117–126.
- Rendy Reza Abitama, Muhammad Abror Rahmat, Muhamad Subkhan, & Denda Ginanjar. (2024). Sekolah Adaptif: Strategi Membangun Budaya Organisasi yang Responsif terhadap Perubahan. *Jurnal Sadewa : Publikasi Ilmu Pendidikan, Pembelajaran Dan Ilmu Sosial*, 2(4), 145–151.
- Riyadi, Dr. S., Helmita, A, C. H. S., & Anggoro, Y. (2024). The Effect of Change Management on Organizational Adaptability in The Age of Technology. *Maneggio*, 1(5), 85–97.
- Riadi, S., Zakaria, A., & Lestari, N. (2022). Teacher Professionalism in the Era of Digital Transformation: A Study of Indonesian High Schools. *Journal of Educational Management and Leadership*, 7(3), 145–160.
- Senge, P. M. (2010). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday.
- Şensin, C., & Yılmaz Can, D. (2024). Ministerial touch on teachers' professional development: A hands-on model as PLCs. *Pedagogical Perspective*, 14–26.
- Steiss, A. W. (Ed.). (2019). *Change Management*. In *Strategic Management for Public and Nonprofit Organizations* (0 ed., pp. 258–293). Routledge.
- Steyn, G. M. (2017). Fostering Teachers' Professional Development Through Collaboration in Professional Learning Communities. In I. H. Amzat & N. P. Valdez (Eds.), *Teacher Empowerment Toward Professional Development and Practices* (pp. 241–253). Springer Singapore.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional Learning Communities: A Review of the Literature. *Journal of Educational Change*, 7(4), 221–258.
- Stoll, L., & Louis, K. S. (Eds.). (2007). *Professional Learning Communities: Divergence, Depth and Dilemmas*. Berkshire: Open University Press.
- Subagio, A. (2025). Implementation of Change Management by the Principal at the Driving School at State Senior High School 1 Segedong. *Riwayat: Educational Journal of History and Humanities*, 8(3), 3204–3220.
- Susanti, Hizir Sofyan, & Bahrin. (2025). Effective Leadership Strategies for Improving Teacher Performance in Primary Schools. *International Journal of Educational Technology Research*, 3(2), 412–425.
- Suyanto. (2020). *Manajemen Perubahan dalam Pendidikan: Strategi, Tantangan, dan Implementasi di Sekolah*. Yogyakarta: UNY Press.
- Syawal, M., Ibrahim, M. M., Ramli, B., Damopolii, M., & Halimah, A. (2025). Principal Management in Improving Teacher Work Culture at MI Darul Hikmah, Bone District. *Al Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, 19(5), 2800.
- Tafonao, T., & Ditakristi, A. H. V. (2022). Digital transformation through information technology: The dynamics of the role of teachers in implementing online-based learning. *Electronic Journal of Education, Social Economics and Technology*, 3(2), 63–69.

- Tampang, B. L. L., & Wonggo, D. (2018). Teacher Professionalism in Technical and Vocational Education. IOP Conference Series: Materials Science and Engineering, 306, 012017.
- Tung, D. D. (2022). Quản trị thay đổi (Change Management: Theory and practice). Open Science Framework.
- Vescio, V., Ross, D., & Adams, A. (2008). A Review of Research on the Impact of Professional Learning Communities on Teaching Practice and Student Learning. *Teaching and Teacher Education*, 24(1), 80–91.
- Villegas-Ochoa, F. M. (2024). Estado del Arte sobre Comunidades de Aprendizaje Profesional en las prácticas de gestión escolar: (2020-2023). *Revista Peruana de Investigación e Innovación Educativa*, 4(1), e26747.
- Wahyuni, S. (2023). Implementasi Strategi Manajemen Perubahan. *AI-DYAS*, 2(2), 459–466.
- Zakaria, A., Riadi, S., & Fauziah, D. (2021). Pengaruh Kepemimpinan Transformasional terhadap Profesionalisme Guru di Sekolah Menengah Atas. *Jurnal Manajemen Pendidikan Indonesia*, 12(2), 97–109