

MANAGING TEACHER PROFESSIONAL DEVELOPMENT IN A RESOURCE-CONSTRAINED SCHOOL: A QUALITATIVE CASE STUDY FROM CENTRAL MALUKU, INDONESIA

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Abstract

Teacher professional development (TPD) is widely regarded as a key mechanism for strengthening instructional quality, yet the availability of professional learning opportunities does not necessarily translate into sustained teacher participation or organizational learning. This study examined how TPD was managed at SMA Negeri 18 Maluku Tengah, with particular attention to program availability, implementation, teacher participation, institutional constraints, and perceived effects. A qualitative descriptive case-study approach was used. Data were generated through in-depth interviews and document analysis involving six purposively selected informants: the principal, two vice principals, and three senior teachers. Data were analyzed through data condensation, data display, and conclusion drawing, with credibility, dependability, and confirmability considered throughout the analytic process. The findings show a substantial gap between awareness of TPD opportunities and their institutionalization at school level. Four of the fourteen identified development programs were implemented within the school—teacher certification/equivalency, educational supervision, MGMP empowerment, and peer collaboration—while three were accessed externally with limited participation and seven had not been implemented. Teacher participation was constrained less by expressed unwillingness than by limited funding, transportation, information, workload, and school-level planning. The study therefore conceptualizes the central problem as a management and enabling-conditions gap rather than simply a motivation deficit. The case contributes context-sensitive evidence that school-based TPD in geographically constrained settings requires an integrated cycle of needs identification, planning, implementation, monitoring, evaluation, and follow-up.

Keywords: teacher professional development, school-based professional learning, educational management, teacher participation, professional learning communities, Indonesia, Central Maluku

Abstrak

Pengembangan Profesional Guru (PPG) secara luas dianggap sebagai mekanisme kunci untuk memperkuat kualitas pengajaran, namun ketersediaan peluang pembelajaran profesional belum tentu berujung pada partisipasi guru yang berkelanjutan atau pembelajaran organisasi. Penelitian ini mengkaji bagaimana PPG dikelola di SMA Negeri 18 Maluku Tengah, dengan fokus khusus pada ketersediaan program, implementasi, partisipasi guru, kendala kelembagaan, dan dampak yang dirasakan. Pendekatan studi kasus deskriptif kualitatif digunakan. Data diperoleh melalui wawancara mendalam dan analisis dokumen yang melibatkan enam informan yang

dipilih secara purposif: kepala sekolah, dua wakil kepala sekolah, dan tiga guru senior. Data dianalisis melalui kondensasi data, penyajian data, dan penarikan kesimpulan, dengan mempertimbangkan kredibilitas, keandalan, dan konfirmabilitas sepanjang proses analisis. Temuan menunjukkan adanya kesenjangan yang signifikan antara kesadaran akan peluang TPD dan pelembagaannya di tingkat sekolah. Empat dari empat belas program pengembangan yang diidentifikasi telah dilaksanakan di dalam sekolah—sertifikasi/kesetaraan guru, pengawasan pendidikan, pemberdayaan MGMP, dan kolaborasi sesama guru—sementara tiga diakses secara eksternal dengan partisipasi yang terbatas, dan tujuh lainnya belum dilaksanakan. Partisipasi guru lebih dibatasi oleh keterbatasan dana, transportasi, informasi, beban kerja, dan perencanaan di tingkat sekolah daripada oleh ketidakinginan yang diungkapkan. Oleh karena itu, penelitian ini mengkonseptualisasikan masalah utamanya sebagai kesenjangan dalam manajemen dan kondisi pendukung, bukan sekadar kekurangan motivasi. Studi ini memberikan bukti yang sensitif terhadap konteks bahwa TPD berbasis sekolah di lingkungan dengan keterbatasan geografis memerlukan siklus terintegrasi yang mencakup identifikasi kebutuhan, perencanaan, pelaksanaan, pemantauan, evaluasi, dan tindak lanjut.

Kata kunci: pengembangan profesional guru, pembelajaran profesional berbasis sekolah, manajemen pendidikan, partisipasi guru, komunitas pembelajaran profesional, Indonesia, Maluku Tengah

INTRODUCTION

Teacher professional development (TPD) is increasingly understood as an organizational and instructional process rather than a collection of workshops. Contemporary evidence indicates that professional learning is more likely to influence teaching when it is focused on relevant content, provides opportunities for active learning, is coherent with school priorities, involves collaboration, and is sustained over time (Desimone, 2009; Darling-Hammond et al., 2017; Sims et al., 2025). Recent meta-analytic evidence further indicates that TPD can improve teaching and student outcomes, although effects vary considerably across programs and implementation conditions (Sims et al., 2025; Visscher et al., 2025). This variability makes the organizational conditions under which teachers participate in and enact professional learning an important research problem.

TPD is also shaped by the context in which it is delivered. Teacher learning occurs through interactions among individual teachers, professional activities, school organizations, and wider policy systems (Borko, 2004; Opfer & Pedder, 2011). School leadership, collaboration, coaching, feedback, and opportunities to apply new knowledge in practice can strengthen professional learning, whereas fragmented provision, weak follow-up, and limited institutional support can reduce its transfer into classroom practice (Kraft et al., 2018; Sancar et al., 2021; Sims et al., 2025). Professional learning communities and teacher collaboration are particularly relevant because they can shift professional development from individual attendance toward collective inquiry and practice improvement (Vangrieken et al., 2015; Prenger et al., 2021).

In Indonesia, the challenge is not simply the provision of TPD opportunities. Research on teacher professional development reforms has identified systemic constraints, including weak alignment between program design and teachers' existing practice, insufficient

post-training follow-up, limited opportunities for practice, and broader system-level incoherence (Revina et al., 2020). These findings suggest that school-level management matters because the same formal program can produce different participation patterns depending on leadership, resources, communication, scheduling, and opportunities for collaborative enactment.

The present case is situated at SMA Negeri 18 Maluku Tengah, a secondary school in Wakal Village, Leihitu District, Central Maluku Regency. The source study identifies challenges involving teachers' technology use, instructional development, classroom action research, and participation in seminars, training, and professional forums. It also identifies transportation costs, participation fees, irregular program availability, and limited routine monitoring as practical constraints. These conditions make the school a useful case for examining how TPD is translated from a policy-level opportunity into a school-level professional learning system.

Although TPD has been extensively studied internationally, less attention has been paid to how professional development is managed as an organizational process within individual schools located in geographically dispersed and resource-constrained contexts. Much of the literature focuses on the design or effectiveness of particular TPD interventions, whereas the present study examines the institutional infrastructure surrounding multiple forms of professional learning: planning, implementation, participation, documentation, monitoring, and perceived effects. The research gap is therefore not a lack of knowledge about effective TPD features, but limited understanding of how those features are enabled or constrained by school-level management in a Central Maluku context.

Accordingly, this study addressed four questions: (1) What teacher professional development programs are available and implemented at SMA Negeri 18 Maluku Tengah? (2) How are these programs planned and implemented at school level? (3) How do teachers participate in the available professional development opportunities, and what constrains participation? and (4) What changes or benefits do school stakeholders perceive from the programs that have been implemented?

The study contributes in two ways. Empirically, it documents the implementation gap between the existence of multiple TPD opportunities and their uneven enactment in a geographically constrained Indonesian school. Conceptually, it treats TPD as a managed organizational cycle rather than as participation in isolated training events. This perspective connects the literature on effective professional learning with educational management by foregrounding needs identification, resource allocation, participation structures, monitoring, and follow-up.

The analysis draws on a systems-oriented view of teacher professional learning. First, effective TPD is characterized by content focus, active learning, coherence, sufficient duration, and collective participation (Desimone, 2009; Garet et al., 2001). Second, teacher learning is situated within interacting individual, school, and activity systems,

meaning that participation cannot be interpreted independently of organizational conditions (Opfer & Pedder, 2011). Third, school-based collaboration and professional learning communities can provide structures for sustained learning when they are supported by leadership, shared goals, trust, and professional dialogue (Vangrieken et al., 2015; Prenger et al., 2021).

Recent theory and meta-analysis also indicate that effective TPD must do more than expose teachers to information: it should develop relevant professional knowledge, motivate changes in practice, support the development of teaching techniques, and help teachers embed those changes in routine practice (Sims et al., 2025). The present study therefore interprets the school case through four linked dimensions: (a) program design and relevance, (b) organizational enabling conditions, (c) participation and collaborative enactment, and (d) monitoring, evaluation, and follow-up. These dimensions provide an analytic lens rather than a statistical model.

METHOD

Research Design and Setting

This study used a qualitative descriptive case-study design to examine teacher professional development as an organizational process in its natural institutional setting. The case was SMA Negeri 18 Maluku Tengah, located in Wakal Village, Leihitu District, Central Maluku Regency. A qualitative case approach was appropriate because the research questions concerned how programs were organized, experienced, constrained, and documented rather than estimating a statistical treatment effect.

Participants and Sampling

Participants were selected purposively because they held direct responsibilities or experience related to school management, curriculum, student affairs, and teacher professional development. Six informants participated: the principal, the vice principal for curriculum affairs, the vice principal for student affairs, and three senior teachers. The source manuscript identifies an approximately three-month research period, but the exact dates and frequency of data collection should be reported from the research log before submission.

PARTICIPANT CATEGORY	N	ANALYTIC RELEVANCE
PRINCIPAL	1	School policy, planning, supervision, and institutional support
VICE PRINCIPAL— CURRICULUM	1	Curriculum planning, instructional supervision, teacher competency development

VICE PRINCIPAL— STUDENT AFFAIRS	1	Links between teacher professionalism and student development
SENIOR TEACHERS	3	Implementation, participation, barriers, and perceived effects
TOTAL	6	

Data Collection

Data were generated through in-depth interviews and document analysis. Interviews were conducted in two stages: preliminary conversations to establish rapport and subsequent in-depth interviews focused on TPD planning, implementation, participation, barriers, and evaluation. Documentary evidence included the school profile, vision and mission, meeting minutes, correspondence, guest books, activity schedules, and other records related to teacher professional development. The interview guide and document checklist were derived from the study's research dimensions.

The source manuscript does not provide sufficient detail on the exact number and duration of interviews, transcription procedures, dates of fieldwork, or the proportion of interviews conducted face-to-face versus through communication media. These details should be added from the original field records before journal submission.

Data Analysis

Data analysis followed an iterative process of data condensation, data display, and conclusion drawing/verification. Interview and documentary data were first organized according to the research questions and analytical dimensions. Relevant statements and documentary evidence were then grouped into thematic categories concerning program availability, planning, implementation, participation, constraints, and perceived effects. Cross-source comparison was used during interpretation to examine convergence and divergence between informant accounts and documentary evidence.

ANALYTIC STAGE	PROCEDURE	OUTPUT
DATA CONDENSATION	Select, code, simplify, and organize interview and documentary evidence in relation to the research questions	Relevant coded data
DATA DISPLAY	Arrange evidence in thematic matrices, summaries, and comparative tables	Patterns across programs and participants

CONCLUSION DRAWING/VERIFICATION	Compare themes across sources and check interpretations against available evidence	Contextual explanations of TPD management
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Trustworthiness and Ethics

Trustworthiness was addressed through credibility, dependability, and confirmability. Credibility was supported by comparing interview accounts with school documents. Dependability was addressed through consistent use of the interview guide and documentation procedures. Confirmability was supported by retaining documentary evidence and an audit trail linking interpretations to the collected data. The source manuscript reports school permission, voluntary participation, explanation of the study purpose, and confidentiality procedures.

For publication, the authors should insert the formal ethics approval information, if applicable, and specify how informed consent was obtained. If no formal institutional ethics review was required, this should be stated together with the basis for that determination. The current source does not provide an ethics committee name or approval number; these details must not be fabricated.

RESULTS AND DISCUSSION

Awareness of Professional Development Opportunities

The participants were generally aware that multiple forms of teacher professional development were available. However, awareness varied in depth and did not consistently translate into school-level planning or participation. The key pattern was therefore an implementation gap: teachers knew that professional learning opportunities existed, but the school did not yet have a comprehensive mechanism for mapping those opportunities onto teacher needs, annual priorities, budgets, schedules, and evaluation indicators.

Uneven Implementation of the Fourteen Identified Programs

The case evidence identified fourteen professional development programs in the framework considered by the school. Four were implemented within the school, three were accessed outside the school with limited participation, and seven had not been implemented. The distribution is summarized below.

STATUS			PROGRAMS IDENTIFIED IN THE SOURCE STUDY	
IMPLEMENTED SCHOOL (4)	WITHIN	THE	Teacher	equivalency/certification; educational supervision; MGMP empowerment; peer collaboration

IMPLEMENTED OUTSIDE THE SCHOOL WITH LIMITED PARTICIPATION (3)	Teacher qualification upgrading; integrated competency-based training; classroom action research
NOT YET IMPLEMENTED (7)	Teacher symposiums; other traditional training programs; reading/writing journals or scientific papers; participation in scientific meetings; internships; following current educational news/media; active participation in professional organizations

The pattern suggests that professional learning was concentrated in activities that were familiar, embedded in existing school routines, or linked to established administrative processes. Activities requiring greater external networking, academic literacy, financial resources, or sustained documentation were less developed. Rather than indicating simple teacher resistance, this pattern points to the interaction between opportunity structures and institutional capacity.

Planning and Documentation as a Management Weakness

Participants described the importance of formal planning but indicated that a comprehensive school-level professional development roadmap was not yet consistently available. Annual meetings occurred, but the evidence did not show a systematic document linking identified teacher needs to program priorities, targets, budget allocation, schedules, responsible personnel, evaluation indicators, and follow-up. Consequently, professional development was often activated by incidental opportunities or external invitations rather than by a continuous school-managed cycle.

Teacher Participation: Willingness Constrained by Opportunity

The findings indicate that teachers expressed willingness to improve their professional capacity, while participation remained uneven. Reported barriers included transportation costs, training fees, limited information about available programs, administrative workload, irregular program availability, and limited institutional readiness. This distinction is analytically important: low participation should not automatically be interpreted as low motivation. In this case, participation was shaped by the accessibility and institutionalization of professional learning opportunities.

Perceived Effects and the Limits of the Evidence

Participants and school documents indicated perceived benefits in professional awareness, instructional support, readiness for professional responsibilities, and the development of some school documentation. However, the study did not collect standardized measures of teacher competence, classroom observation data, or student achievement data. Accordingly, the findings support a conclusion about perceived and

documented benefits, not a causal claim that the programs improved teaching quality or student outcomes.

The strongest perceived contribution came from supervision, MGMP activities, certification-related development, and peer collaboration. At the same time, scientific writing, classroom inquiry, professional networking, and systematic evaluation remained comparatively weak. The case therefore represents an emerging professional learning system rather than a fully institutionalized one.

DISCUSSION

From Program Availability to Organizational Capacity

The central finding is the gap between program availability and organizational capacity to enact professional learning. This finding extends the familiar argument that effective TPD depends on design features by showing that those features must be translated into school-level routines. Desimone's (2009) core features and Sims et al.'s (2025) theory of effective TPD both imply that exposure alone is insufficient. Teachers need opportunities to learn, practice, receive feedback, and embed new approaches. In the present case, several enabling structures needed for that process—formal planning, systematic follow-up, and documentation—were incomplete.

The Indonesian context reinforces this interpretation. Revina et al. (2020) found that weaknesses in Indonesian TPD cannot be explained solely by technical design because broader system-level constraints shape implementation. The present case shows how such constraints can become visible at school level through transportation barriers, funding limitations, uneven information flows, and dependence on externally initiated programs.

Participation Is an Organizational Phenomenon

The study also suggests that teacher participation should be understood as an organizational phenomenon. Teachers may value professional development but still participate unevenly when access is costly, information is fragmented, or activities are not incorporated into the school's work structures. This interpretation is consistent with the ecological view of teacher professional learning advanced by Opfer and Pedder (2011), in which learning emerges from interactions among individual dispositions, organizational conditions, and learning activities.

This finding has implications for school leadership. Rather than treating attendance as the principal indicator of professional development, leaders can create conditions for collective learning through scheduled peer collaboration, lesson-focused discussion, instructional supervision, coaching, and structured reflection. Evidence on teacher collaboration and professional learning communities similarly indicates that collaboration is most productive when it is purposeful, supported, and connected to professional practice (Vangrieken et al., 2015; Prenger et al., 2021).

From Fragmented Activities to a Professional Learning Cycle

The case supports a shift from an activity-based model toward a management cycle: needs identification → priority setting → program design → implementation → monitoring → evaluation → follow-up. Such a cycle is consistent with evidence that TPD should be coherent, sustained, practice-oriented, and embedded in teachers' work (Darling-Hammond et al., 2017; Sims et al., 2025). In the present school, MGMP and peer collaboration provide plausible internal platforms for this transition because they already exist within professional routines.

An internal model should not simply replace external professional development. External training can provide expertise and resources unavailable locally. The management challenge is to connect external opportunities to internal follow-up so that participation does not end with attendance or certification. A locally feasible model could combine external learning with school-based enactment, peer observation, reflective dialogue, and evidence of application in teaching.

Contextual Contribution: Professional Learning in a Geographically Constrained Setting

The Central Maluku case contributes contextual evidence to an international literature that often evaluates TPD programs without fully describing the geographical and logistical conditions of the host school. The reported barriers suggest that transportation, funding, and access to external networks are not peripheral issues; they influence whether professional learning can occur at all. This makes school-based, job-embedded approaches particularly relevant, although the present study does not test the effectiveness of such an intervention.

Toward a School-Based Management Model

Based on the findings, the study proposes an analytic—not experimentally validated—management framework for school-based TPD. The framework contains five linked functions: (1) needs mapping based on teacher competency and instructional priorities; (2) annual program planning that distinguishes internal and external opportunities; (3) implementation through MGMP, supervision, peer collaboration, and targeted external training; (4) monitoring of participation and application in practice; and (5) evaluation and follow-up using evidence of teacher learning and instructional change. This framework should be treated as a conceptual implication of the case rather than as a validated intervention model.

Implications

For school leaders, the findings support an annual TPD roadmap that identifies teacher needs, prioritizes programs, assigns responsibilities, allocates resources, and specifies evidence for monitoring and follow-up. For teachers, the findings suggest strengthening peer learning, classroom inquiry, and reflective practice rather than relying primarily on externally delivered workshops. For education authorities, support should address not only the supply of training but also school capacity to implement and sustain professional

learning. In geographically constrained settings, hybrid delivery may expand access, but online participation should be connected to mentoring and opportunities for application.

A practical priority is to strengthen existing structures rather than create numerous new programs. MGMP, instructional supervision, peer collaboration, and classroom action research can be organized as components of a single professional learning cycle. This approach is consistent with evidence that professional learning is more likely to influence practice when it is coherent, active, collaborative, and sustained.

Limitations and Future Research

Several limitations should be considered. First, the study involved six informants from one school, all of whom were school leaders or senior teachers; the perspectives of early-career teachers, students, parents, supervisors, and education officials were not included. Second, the study relied on interviews and documents rather than systematic classroom observation or direct measures of teacher competence. Third, the study examined perceived and documented effects, not causal effects on teaching practice or student achievement. Fourth, the source manuscript does not report sufficient detail on interview frequency, duration, transcription, coding procedures, or formal ethics approval. These details should be completed before submission.

Future studies could use multi-school qualitative designs to compare professional learning management across urban, rural, and archipelagic settings. Mixed-method studies could combine interviews with teacher competency measures, classroom observations, participation records, and student learning indicators. Intervention studies could also test whether a structured school-based professional learning cycle improves teacher practice over time.

CONCLUSION

Teacher professional development at SMA Negeri 18 Maluku Tengah was present but had not yet been institutionalized as a comprehensive school-based system. Four of fourteen identified programs were implemented within the school, three were accessed externally with limited participation, and seven remained unimplemented. The principal challenge was not simply the availability of programs or teacher willingness, but the absence of sufficiently integrated planning, resource support, participation structures, monitoring, and follow-up. The case indicates that school-based TPD in geographically constrained settings should be managed as a continuous organizational process linking teacher needs, collaborative learning, implementation, evaluation, and improvement. Because the study is qualitative and single-site, these conclusions should be interpreted as contextual explanations rather than generalized or causal claims.

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