

STRENGTHENING TEACHER SELF-EFFICACY THROUGH PROFESSIONAL LEARNING COMMUNITIES: EVIDENCE FROM REMOTE SCHOOLS IN INDONESIA

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Abstract : *Teacher professional development in remote areas continues to face challenges due to limited access to resources, professional isolation, and a lack of ongoing support. In this context, Professional Learning Communities (PLCs) are viewed as a collaborative approach with the potential to enhance teacher capacity and self-efficacy. However, empirical evidence regarding the role of PLCs in remote areas remains limited. This study aims to explore teachers' experiences in developing self-efficacy through participation in PLCs in remote schools in East Nusa Tenggara, Indonesia. The study employed a qualitative approach with a descriptive phenomenological design. Data were collected through in-depth semi-structured interviews and document analysis, then analyzed through phenomenological stages. The results indicate that participation in PLCs enhances teacher self-efficacy through collaborative learning, peer support, and reflective practice. This study emphasizes the role of PLCs as a mechanism for teacher empowerment in remote areas and the importance of leadership support, structured collaboration, and resource facilitation for ongoing professional development.*

Keywords : *Learning Communities; Teachers' Self-efficacy; Remote School.*

Abstrak : *Pengembangan profesional guru di daerah terpencil masih menghadapi tantangan akibat keterbatasan akses sumber daya, isolasi profesional, dan minimnya dukungan berkelanjutan. Dalam konteks ini, Professional Learning Community (PLC) dipandang sebagai pendekatan kolaboratif yang berpotensi meningkatkan kapasitas dan self-efficacy guru. Namun, bukti empiris terkait peran PLC di wilayah terpencil masih terbatas. Penelitian ini bertujuan mengeksplorasi pengalaman guru dalam mengembangkan self-efficacy melalui partisipasi dalam PLC di sekolah daerah terpencil di Nusa Tenggara Timur, Indonesia. Penelitian menggunakan pendekatan kualitatif dengan desain fenomenologi deskriptif. Data dikumpulkan melalui wawancara mendalam semi-terstruktur dan analisis dokumen, kemudian dianalisis melalui tahapan fenomenologi. Hasil menunjukkan bahwa partisipasi dalam PLC meningkatkan self-efficacy guru melalui pembelajaran kolaboratif, dukungan sejawat, dan praktik reflektif. Studi ini menegaskan peran PLC sebagai mekanisme pemberdayaan guru di daerah terpencil serta pentingnya dukungan kepemimpinan, kolaborasi terstruktur, dan fasilitasi sumber daya untuk pengembangan profesional berkelanjutan.*

Kata Kunci : *Komunitas Pembelajaran; Efikasi Diri Guru; Sekolah Jarak Jauh.*

INTRODUCTION

The improvement of educational quality globally increasingly depends on sustainable and context-responsive teacher professional development. International policy frameworks such as UNESCO's Education 2030 and the Teaching and Learning International Survey (TALIS) by the OECD emphasize the importance of Professional Learning Communities (PLCs) as a strategic approach to enhancing teachers' professional capacity through collaboration and reflective practice (Hadi Mogavi et al., 2024; Karim et al., 2025). Unlike conventional professional development, which is often episodic and externally driven, PLCs promote continuous, school-based learning grounded in teachers' daily instructional practices.

A growing body of research indicates that PLCs can improve instructional quality, foster collaborative cultures, and contribute to student achievement (Aminulloh et al., 2023; Kolovou et al., 2024; Zhang et al., 2024). However, these benefits are not automatically achieved through the mere establishment of PLC structures. Instead, their effectiveness depends on how schools create supportive conditions, including shared vision, collaborative norms, and learning-oriented leadership (Karim et al., 2025; Solechan et al., 2023). This suggests that PLCs should be understood not only as organizational structures but as dynamic social processes embedded within school culture.

Within this context, teacher self-efficacy emerges as a crucial factor influencing how teachers engage in professional learning and translate it into classroom practice. Rooted in the theory of Rumjaun & Narod, (2025), self-efficacy refers to individuals' beliefs in their capabilities to perform tasks and achieve desired outcomes (Saihi et al., 2024). Teachers with high self-efficacy are more likely to adopt innovative practices, persist in challenging situations, and positively impact student learning (Bucea-Manea-Țoniș et al., 2020; Victoria et al., 2024). Prior studies suggest that participation in collaborative learning environments such as PLCs can strengthen teacher self-efficacy through shared experiences, peer support, and reflective dialogue (Nicol & Kushwah, 2024). Nevertheless, existing research tends to treat self-efficacy as an outcome variable, with limited attention to the experiential processes through which PLC participation shapes these beliefs.

These challenges are particularly evident in remote school contexts, where teachers face structural and professional constraints. Limited access to learning resources, geographic isolation, and insufficient institutional support can hinder both the implementation of PLCs and teachers' professional growth (Dias et al., 2024). In the context of East Nusa Tenggara Province, Indonesia, for instance, PLC-related activities are often restricted to formal and periodic forums such as MGMP, KKG, and MKKS, which may not sufficiently foster sustained collaborative learning. As a result, PLC practices in these

settings may remain superficial and less impactful on teachers' professional development and self-efficacy.

Despite the increasing interest in PLC research, several critical gaps remain. *First*, most studies focus on the implementation and outcomes of PLCs, with limited exploration of teachers' lived experiences within these communities. *Second*, empirical research examining the relationship between PLC participation and teacher self-efficacy in remote or under-resourced contexts is still scarce. *Third*, the predominance of quantitative approaches limits a deeper understanding of how teachers interpret and internalize their experiences in PLCs. Addressing these gaps, this study offers a novel contribution by employing a phenomenological approach to explore the lived experiences of teachers in remote schools (Procko et al., 2023; Sultoni et al., 2023). By focusing on how teachers perceive and make meaning of their participation in PLCs, this study provides a more nuanced understanding of the processes through which collaborative learning environments influence teacher self-efficacy. Therefore, this study aims to explore the essence and meaning of teachers' experiences in remote schools regarding the role of Professional Learning Communities in enhancing their self-efficacy. The findings are expected to contribute theoretically to the literature on PLCs by incorporating an experiential perspective and practically by informing context-sensitive strategies for teacher professional development in remote areas.

METHOD

This study employed a qualitative approach using descriptive (transcendental) phenomenology to explore teachers' lived experiences in developing self-efficacy through participation in Professional Learning Communities (PLCs). Descriptive phenomenology, grounded in the work of Edmund Husserl and operationalized by John W. Creswell, was selected because it focuses on describing the essence of a phenomenon as experienced by individuals, while minimizing researcher interpretation through bracketing. This approach is appropriate for the present study as it aims to capture how teachers consciously experience and interpret their participation in PLCs and how these experiences shape their self-efficacy within specific contextual settings, particularly remote schools. The study involved eight teachers from remote elementary and secondary schools in East Nusa Tenggara Province, Indonesia, specifically in Southwest Sumba, Nagekeo, and Kupang Regencies. These areas are officially classified as remote regions by the Indonesian government due to their limited access to infrastructure, educational resources, and professional development opportunities.

Participants were selected using purposive sampling to ensure information-rich cases. The selection criteria included a minimum of five years of teaching experience in remote schools, active participation namely leader in school-based PLCs for at least two years, and teacher certification status. The relatively small number of participants is consistent with phenomenological research, which prioritizes depth over breadth. The sample size was considered sufficient as it allowed for rich, detailed accounts of lived experiences and reached data saturation, where no new themes emerged from the data.

Data were collected through semi-structured, in-depth interviews and document analysis. Semi-structured interviews were conducted to explore participants' lived experiences in developing self-efficacy through PLC participation. Each interview lasted approximately 30–45 minutes and followed an interview guide designed around key research questions. Examples of guiding questions included on How do you experience participation in PLC activities at your school? In what ways has PLC involvement influenced your confidence in teaching? What challenges and supports do you encounter in developing your self-efficacy? All interviews were audio-recorded with participants' consent and transcribed verbatim for analysis. To complement the interview data, relevant documents were analyzed, including records of PLC activities (e.g., meeting notes, schedules), teachers' reflective journals or reports, and visual documentation such as photos or videos of PLC implementation.

Data were analyzed using the descriptive phenomenological procedure outlined by John W. Creswell (2013). The analysis followed systematic and operational steps as follows, firstly, data organization and reduction which interview transcripts and documents were organized and prepared for analysis. Irrelevant data were removed, and meaningful segments were identified. Secondly, horizontalization, is significant statements related to teachers' experiences of PLC and self-efficacy were identified and treated with equal value to avoid premature prioritization. Thirdly, clustering of meaning that is the statements were grouped into themes representing shared meanings and patterns across participants. Then, textural description (What) is a detailed description was developed to explain what participants experienced regarding PLC participation and self-efficacy development. Next, Structural Description (How) is the analysis then focused on how the experiences occurred, including contextual factors such as school conditions and professional interactions. Lastly, essence of the experience which is the textural and structural descriptions were synthesized to construct the core essence of teachers' lived experiences. This systematic process ensured that findings were grounded in participants' accounts and reflected the phenomenon comprehensively.

To ensure the rigor and credibility of the study, several strategies were employed in triangulation that the data were collected from multiple sources (interviews and documents) to validate findings. Then, member checking which is participants were given the opportunity to review summaries of their responses to confirm accuracy and interpretation. Next, audit trail explained detail documentation of data collection and analysis procedures then was maintained to ensure transparency and replicability. Last, thick description findings were presented with detailed contextual descriptions to enhance transferability.

Ethical approval was obtained prior to the study. Participants were informed about the research objectives, procedures, and their rights, including voluntary participation and withdrawal at any time. Written informed consent was obtained, and confidentiality was ensured by anonymizing participants' identities. All data were securely stored and used solely for research purposes.

RESULT AND DISCUSSION

1. Results

The result section is presented before the discussion as two interrelated subsections. The result sections present the research's empirical findings based on field data, while the discussion section interprets these findings by linking them to the theoretical framework and previous research, thus it provides a comprehensive understanding of the phenomenon being studied. This study identified six major themes representing teachers' lived experiences of participating in PLCs in remote schools as research findings interpreted into themes as increased teacher self-efficacy, collegial collaboration, organizational support, overcoming infrastructure barriers, instructional innovation, and impact on student learning. These themes emerged from the horizontalization and clustering of significant statements and are supported by direct participant quotations.

a) Increased Teacher Self-Efficacy

The most dominant finding was the enhancement of teachers' confidence and teaching capability. Participants consistently reported increased self-belief after engaging in PLC activities. The empirical findings described the participants feeling changed from uncertainty to confidence, particularly in managing classroom, applying teaching strategies and responding to challenges in remote context. This theme reflects the participants' motivation enhanced due to their classroom experiences with students.

Table 1: The Significant Statements of Increased Teacher Self-Efficacy

Themes	Descriptions Found	Field Evidence in Teacher Interviews
Increased teaching self-efficacy	Improvement feeling to certainty	"Before joining the learning community, I felt I was the only source of learning... After regularly participating in PLC, I made a big change before initially feared by students, I became someone they longed for." (P1) "The learning method changed; students no longer feel afraid to express questions and answers; the classroom atmosphere changed from a monologue by the teacher to a dialogue." (P1)
	Changed to learning method	"I feel more confident in teaching because I have learned from the experiences of other teachers." (P2) "The most important change I feel is being more confident when leading learning because my knowledge of models, methods, and assessments is better." (P8) "I feel my self-confidence as a teacher has increased after joining PLC." (P5)
	Self-confidence improvement	"I experienced an increase in teaching motivation after joining PLC". (P8)
	Developing motivation in challenges	"PLC motivates me to learn independently and develop myself continuously." (P6) "I feel more prepared to face learning challenges in remote areas". (P7)

Table 1 shows that the findings indicate the teachers' self-efficacy can be enhanced by involving in PLCs at school and it is not only limited to conceptual thinking but also affects their practical teaching and communications with students. Those are seen, *firstly*, in improvement feeling to certainty when they are longed by the students. *Secondly*, changed to learning method is seen by they confidently gain knowledge of models, methods and assessment better than before. *Thirdly*, self-confidence improvement was gained after joining PLC because they have learned experiences from sharing good practices of their colleagues. *Lastly*, developing motivation in challenges was shown in continuous learning in PLC.

Thus, the data found in the table support that teacher with strong self-efficacy more initiative and enthusiasm for teaching and tend to be more resilient in facing challenges of remote area context. This is not only a concept but also strengthen their self-efficacy, professional development and learning community in school.

b) Collegial Collaboration

PLC participation fostered a strong culture of collaboration and mutual support among teachers. It demonstrates that teachers work collaboratively to discuss

problems in team then solve the problems and find possible solutions as collective responsibility. This collegial collaboration cultivates the teachers' self-efficacy by collaboratively discussing and solving problems related to teaching learning. The research findings on this theme were described into collegial support, collaborative learning, collective inquiry, and collective teacher efficacy. These illustrates that the outcomes of PLCs depend on collaborative efforts by the teacher collaboration reduced professional isolation and created a shared space for problem-solving and knowledge exchange.

Table 2: The Significant Statements of Collegial Collaboration

Themes	Descriptions Found	Field Evidence in Teacher Interviews
Collegial collaboration	Collegial Support	"I no longer feel isolated as a teacher in a remote area because I have colleagues who support each other." (P3)
	Collaborative Learning	"PLC creates a collaborative learning culture in our school, where all teachers support each other." (P5) "Collaboration with colleagues in PLC creates a solid team in solving learning". (P7)
	Collective inquiry	"Through PLC, teachers who have information about learning resources share it with other teachers." (P1) "I feel supported by colleagues and school leadership." (P8)
	Collective teacher efficacy	"PLC provides a space for us to discuss learning problems and find solutions together." (P3)

Table 2 shows four main ways that collegial collaboration in PLCs was shaped for improving teacher self-efficacy. This indicates that collegial collaboration is supported by the concept of a successful PLC enabling schools to embrace teams, encourage relationship among teachers, and celebrate collaboration instead of isolation and challenges of remote schools. The research results show that the collegial collaboration practice in PLC can enhance teachers' self-efficacy as described into, *firstly*, collegial support which means teachers' support among one another sustainably affecting their self-efficacy. Instead of barriers encountered, problems are solved effectively. *Secondly*, collaborative learning creates a culture learning for teachers in PLC. They tend to support each other in problem solving. They also found out that collaboration is essential in giving benefit to their self-efficacy improvement. *Thirdly*, collective inquiry was found out in the sharing learning sources to other colleagues at shared good practice in PLC. This is reflected in collective commitments and productive professional relationship that shared knowledge among the group.

Fourthly, collective teacher efficacy is driven into perception of collective efficacy of PLC members directly affected the diligence and and problem solving ability which becoming their goals. This directly increase their collegial collaboration and personally affect each teacher's self-efficacy.

Thus, the data in the table show that a mutual relationship employing collegial collaboration elevating the teachers' self-efficacy. Consequently, PLC plays a vital role of teachers' collaborative learning culture. The four aspects significantly describes the role of collegial collaboration enhancing teachers' self-efficacy.

c) Organizational Support

The effectiveness of PLCs was strongly influenced by leadership and institutional support. However, this indicates that it is highly obliged to school principal to support the implementation of PLC at schools and fully support of institution by providing funds, facilities and time scheduled for a sustain PLC for teacher professional development. The organizational support is reflected into description of research findings as leadership and institutional support. The research data in teacher interviews illustrates that the interventions of school principal brings the practical way of schools as learning organizations

Table 3: The Significant Statements of Organizational Support

Themes	Descriptions Found	Field Evidence in Teacher Interviews
Organizational Support	Leadership support	<i>"The school principal always provides facilities and time for PLC activities, which motivates us to continue learning."</i> (P3) <i>"The committee and school principal provide full support, including funds for teacher competency development."</i> (P5) <i>"I feel supported by colleagues and school leadership."</i> (P8)
	Institutional support	<i>"The school principal and committee strongly support teacher competency development activities. Space, time, and committee fund support have been allocated annually for each teacher."</i> (Participant 4) <i>"A solid team in solving learning problems".</i> (P7)

Table 3 shows that the leadership support found in the principals' policy to facilitate the implementation of PLCs at schools. The support included time allocation, funding, and leadership involvement, which sustained PLC activities. The research findings on organizational support are described as follows, *firstly*, the principal support which encompasses the needs of fund, facilities, and policy for a sustain and continuum PLCs. Based on data found, this directly affects to teachers' motivation improvement. The schools have supported by leadership support enable the actively

set up PLCs as strategy for developing teacher's quality learning. *Secondly*, the institutional support which enabling commitment of team member within PLCs can create a solid team for solving learning problems. The results found out that it strongly supports the teacher competences. It serves the time schedule allocation, space, allocated fund, and collegial commitment. This advocates the concept of school as professional learning community concluding internal and external support of school principal and facilitation provided.

d) Overcoming Infrastructure Barriers

PLC served as a mechanism to address limitations in resources and infrastructure. This illustrates that teachers are collaboratively opened to each other in sharing good practices. The data obtained in-depth interview reveal that sharing good practices encourage teachers to learn from one another by sharing materials and teaching strategies. It shows that they can overcome the challenges related to lack of internet facility. The teachers indirectly grow their inner motivation to adapt the challenges of infrastructure barriers by sharing learning sources in team whether is is carried offline learning resources.

Table 4: The Significant Statements of Overcoming Infrastructure Barriers

Themes	Descriptions Found	Field Evidence in Teacher Interviews
Overcome infrastructure barriers	Sharing good practice	"Limited learning resources are overcome by sharing materials and teaching strategies among teachers in the community." (P2) "PLC helps me overcome the challenge of limited internet access by sharing offline learning resources." (P4)

Table 4 shows that teachers collaboratively adapted to constraints by sharing materials and strategies. They engage deliberately in PLCs by sharing good practice as solution to overcome the barriers of remote schools' context. Field evidence proved that collaborating with peers as vicarious experiences have increased teachers' self-efficacy. This in other way reflect the need of teachers to learn from other colleagues who fit the capacity of sharing new knowledge of teaching practice. Thus, sharing good practice among the teachers in PLCs enlarge their self-efficacy by learning the new materials and teaching strategies.

e) Instructional Innovation

Participation in PLC led to changes in teaching practices and innovation. The observable impact of PLCs on teacher professional development is their instructional

innovation. This theme is described into innovative teaching method and technology integration. Findings are derived from teachers' improvement in instructional capability influenced by participation in PLCs. Data presentation focuses implication of PLCs to teachers teaching method used and assessment. It also emphasizes the impacts on concrete classroom application to actual practice.

Table 5: The Significant Statements of Instructional Innovation

Themes	Descriptions Found	Field evidence in teacher interviews
Instructional innovation	Innovative teaching method	"Through PLC, I learned various assessment techniques". (P6) "I applied the 'gasing' (fast and accurate) calculation technique". (P7)
	Technology integration	"The use of educational technology that I learned from PLC makes learning more interesting for students." (P3)

The table 5 indicates that PLC provides the teachers an applicable learning innovation to solve instructional challenges faced by remote schoolteachers. The theme instructional innovation is described by innovating teaching method and technology integration. The research result show that teachers who participate in PLCs increasingly develop their self-efficacy, *firstly*, by implication on innovative teaching method. PLCs is indicated as teacher learning aid which help them professionally to alter new teaching method. These can be new teaching technique and strategy, new assessment and updated learning sources for teacher and students. *Secondly*, the technology integration proves that PLCs affects teachers' ability to adapt updated teaching demands such as technology use in instructional performances. This indicates the teachers' self-efficacy improvement in instructional performances and affects teaching appraisal. The use of technologies brings new teaching approach increasing students' interest in classroom learning. Thus, it evolves that teachers to student-centered approaches, new technologies learning approaches, and varied assessment strategies on students' needs.

f) Impact on Student Learning

This illustrates that PLCs maintain teachers' commitment to improving student's achievements through shared good practice and collaborative analysis on students learning problems and refining instructional method. This data evidence reveals that students' learning outcomes improved, and their learning motivation is enhanced. The research data shows that PLC significantly seen when teachers perceived positive changes in student engagement and achievement. These are described as following table 6.

Table 6: The Significant Statements of Impact on Student Learning

Themes	Descriptions Found	Field Evidence in Teacher Interviews
Impacts on student learning	Students' learning outcome improvements	"Student learning outcomes have improved, especially in numeracy, after I applied methods learned from PLC." (P2) "Student learning outcomes have increased". (P7)
	Student learning motivation improvements	"Students are more active in class because I apply interactive learning methods". (P4) The increase in learning outcomes was felt through numeracy activities; all calculation techniques using the 'gasing' method learned in PLC activities proved to motivate students to calculate quickly and accurately." (P7)

The table 6 indicates that PLCs in schools are meant to collaborative practices that focused on student learning. The results show that the effective PLCs focuses reviewing and analyzing students work as output learning. This explains the role of PLCs as result orientation to knowing what students' need to learn, knowing what is learned and knowing to do about what they have learned before. This implicates PLC can impact on student learning. This is described into, *firstly*, students' learning outcome improvements. This happens as the teachers applied their knowledge gained from PLC into classroom instructional. This could be transformation in teaching methods affects student learning outcomes. This brings new approach to student-center approach and analysis on the students' performances. This reflects that not only the teachers get new perceptions of teaching improvements but also the students renewal learning climate. *Secondly*, this affects students learning motivation improvements. It reveals that PLC create an active learning environment that benefits the students. The data show that as the learning method changed more interactive, students' motivation in learning are increased. This highly alter the teachers' self-efficacy based on learning result. These outcomes were linked to improved teaching practices learned through PLC.

2. Discussion

The findings indicate that PLC functions as a collaborative learning system that enhances teacher self-efficacy by providing peer learning opportunities, reducing isolation, enabling contextual problem-solving, fostering innovation in teaching. The findings provide strong empirical support for Albert Bandura's self-efficacy theory,

particularly the four sources of efficacy beliefs. *First*, mastery experiences were evident as teachers successfully applied new teaching strategies learned in PLCs, which strengthened their confidence. It reflects how accumulated successful teaching experiences, scaffolded by PLC support, strengthened efficacy beliefs. It indicates that even a small yet significant successes consistently strengthened teachers' self-efficacy (Choephatrueedi et al., 2025). Other research by Zonoubi, Rasekh, & Tavakoli (Zonoubi et.al, 2017; Wang et al., 2023 p.5) revealed that teachers' self-efficacy improved in applying new teaching strategies. This directly brings out result that the teachers in school remote area are beneficially improved their self-efficacy by participating PLCs at school.

Second, vicarious experiences emerged through peer learning and observation as reflected in teacher quotation "*Sharing best practices from colleagues helps me improve my teaching.*" (Participant 5). This confirms that observing similar peers enhances self-efficacy, especially in comparable contexts. As Bandura (1997) noted, vicarious experiences are most powerful when the model is perceived as similar to oneself. Bandura defines that by observing credible, relatable role models can increase teacher self-efficacy (Choephatrueedi et al., 2025). The teachers in the context of remote area get their modelling by situation from their colleges or by observing their experienced colleges (Ma & Cavanagh, 2018; Marschall, 2023 p. 104203). This is valid that collegial collaboration in PLCs can enhance teacher self-efficacy. *Third*, social persuasion was reflected in leadership and peer support, reinforcing teachers' belief in their capabilities. This was obviously stated in representative by "The school principal and committee strongly support teacher competency development activities. Space, time, and committee fund support have been allocated annually for each teacher." (P4). This means that the organizational support a pivotal role to build teachers social persuasion resulting increased teacher self-efficacy. The contribution from mentors, colleagues, students, and principals confirmed teachers' efforts and motivated them to persist through challenges (Choephatrueedi et al., 2025). Based on findings of organizational supports, the experienced, trustworthy, knowledgeable, respected and credible experience of teachers enlarged their self-efficacy (Bandura, 1986; Marschall, 2023; Morris et al., 2017; Pajares, 2006; Palmer, 2011). This also confirms more that principals support and commitment, financial support, and multi stakeholder engagement provides a sustain PLC at schools as teacher professional development.

Fourth, emotional and psychological states improved, as teachers shifted from feelings of isolation and anxiety to confidence and motivation. It is reflected

representative in finding statement by (P1), *"After regularly participating in PLC, I made a big change before initially feared by students, I became someone they longed for."* This evolves the teacher psychological and affective states which are significant of source of teacher self-efficacy (Bandura, 1997; Marschall, 2023; Poulou, 2007). Moreover, the other statement convinced by (P2) *"I feel more confident in teaching because I have learned from the experiences of other teachers."* this concludes that emotional regulation, self-reflection, and peer support are also managed these challenges more effectively.

These findings align with previous studies showing that PLCs enhance teacher collaboration and professional growth (Prenger et al., 2020; Wang et al., 2023). However, this study extends prior research by demonstrating that PLC not only improves teaching practice but also systematically activates all four sources of self-efficacy. This provides a more integrated explanation of how PLC influences teacher development. The key contribution of this study lies in its contextual and phenomenological insight as it reveals how PLC operates in resource-constrained remote schools, not just well-resourced settings. Then, it shows that PLC transforms professional isolation into collaborative agency. Furthermore, it demonstrates that self-efficacy is not merely an outcome but a lived, evolving experience shaped by social interaction. This shifts the perspective from "PLC as structure" to PLC as an experiential process of empowerment. Unlike many studies that report positive PLC outcomes, this study highlights that effectiveness depends on first, sustained participation. Next, leadership support. Then, contextual adaptation. Without these, PLC risks becoming a formal activity without meaningful impact.

This study strengthens the integration of PLC theory with self-efficacy theory by providing a phenomenological understanding of teacher development, practical teaching, schools should institutionalize PLC as part of daily practice. Then, leadership support is critical for sustainability implementation of PLCs. Lastly, PLC can serve as a low-cost strategy for teacher development in remote areas. This study involved a limited number of participants and focused on a specific context. Future research should include larger samples, apply mixed methods, and explore student perspectives.

CONCLUSION

This study demonstrates that PLCs, when implemented as sustained and collaborative learning systems, have the potential to strengthen teacher self-efficacy and support professional growth in challenging educational contexts. By situating these findings within both theoretical and contextual frameworks, this research offers meaningful

contributions to the discourse on teacher professional development and highlights the importance of collaborative learning in enhancing educational quality

The results show that PLC participation enhances teachers' self-efficacy through multiple interconnected processes, including collaborative knowledge sharing, peer support, and reflective practice. Teachers reported increased confidence in applying instructional strategies, greater adaptability in addressing classroom challenges, and improved engagement with students. These findings indicate that self-efficacy development is not an isolated outcome, but an ongoing, socially mediated process embedded in collegial interaction and school culture.

Future research is recommended to examine the relationship between PLC participation and student learning outcomes using mixed-method approaches, explore the long-term sustainability of PLC practices across different school contexts, and investigate how specific PLC components (e.g., leadership, collaboration intensity, or reflective practices) differentially influence teacher self-efficacy. In addition, further studies incorporating comparative or cross-regional designs would strengthen the generalizability of findings and contribute to broader theoretical development.

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