

The Role Of Professional Learning Communities (PLCs) In Improving The Quality Of Learning In High Schools

¹⁾Lindawati Abidin, ²⁾Farida, ³⁾Eka Prihatin, ⁴⁾Nani Hartini

^{1,2,3,4)} Educational Administration, Indonesia University of Education

*Correspondence Author: lindawati.abidin@upi.edu

Article Info

Keywords:

Professional Learning Community, teacher collaboration, professional development, quality of learning, SDG 4.

Informasi Artikel

Kata Kunci:

Professional Learning Community, kolaborasi guru, pengembangan profesional, kualitas pembelajaran, SDGs 4.

Article History

ABSTRACT

Professional Learning Communities (PLCs) still face various challenges in their implementation, such as a weak culture of collaboration, limited time for shared reflection, and insufficient support from school leadership in fostering a collaborative work environment. These conditions result in limited professional development for teachers, a lack of innovation in teaching, and insufficient improvement in student learning outcomes. This study aims to analyze the implementation of Professional Learning Communities in improving the quality of learning and teachers' professional development at schools. The study employs a descriptive qualitative approach with a case study design conducted at SMA Negeri 1 Campaka, Purwakarta Regency, with participants consisting of 1 school principal, 2 teachers, 2 educational staff members, and 3 students. Data were collected through interviews, observations, and documentation, then analyzed using data reduction, data presentation, and conclusion-drawing techniques with triangulation of sources and methods. The results indicate that the implementation of PLCs has proceeded through five main components: supportive leadership, shared vision and values, collective learning, professional knowledge-sharing practices, and supportive conditions that foster collaboration. PLC has been proven to enhance teachers' professional competencies, strengthen a culture of reflection and collaboration, and support improvements in the quality of the learning process. Although challenges such as time constraints and varying levels of teacher participation were identified, PLC remains an effective strategy for building a sustainable culture of professional learning. Thus, PLC can serve as a strategic approach to improving the quality of education at by strengthening teachers' capacities and fostering professional collaboration. This study contributes to the achievement of SDG 4 (Quality Education) by strengthening professional learning communities that support quality, inclusive, and sustainable education.

ABSTRAK

Professional Learning Community (PLC) masih menghadapi berbagai tantangan dalam implementasinya, seperti rendahnya budaya kolaborasi, keterbatasan waktu untuk refleksi bersama, serta belum optimalnya dukungan kepemimpinan sekolah dalam membangun lingkungan kerja yang kolaboratif. Kondisi tersebut berdampak pada terbatasnya pengembangan profesional guru, rendahnya inovasi pembelajaran, dan belum maksimalnya peningkatan hasil belajar peserta didik. Penelitian ini bertujuan menganalisis implementasi Professional Learning Community dalam meningkatkan kualitas pembelajaran dan pengembangan profesional guru di sekolah. Penelitian menggunakan pendekatan kualitatif deskriptif dengan desain studi kasus yang dilaksanakan di SMA Negeri 1 Campaka, Kabupaten Purwakarta, dengan partisipan terdiri atas 1 kepala sekolah, 2 guru, 2 tenaga kependidikan, dan 3 siswa. Data dikumpulkan melalui wawancara, observasi, dan dokumentasi, kemudian dianalisis menggunakan teknik reduksi data, penyajian data, dan penarikan kesimpulan dengan triangulasi sumber dan teknik. Hasil penelitian menunjukkan bahwa implementasi PLC telah berjalan melalui lima komponen utama, yaitu kepemimpinan yang suportif, visi dan nilai bersama, pembelajaran kolektif, praktik berbagi profesional, serta kondisi pendukung yang mendorong kolaborasi. PLC terbukti meningkatkan kompetensi profesional guru, memperkuat budaya reflektif dan kolaboratif, serta mendukung peningkatan kualitas proses pembelajaran. Meskipun masih ditemukan kendala berupa keterbatasan waktu dan variasi tingkat partisipasi guru, PLC tetap menjadi strategi yang efektif dalam membangun budaya belajar profesional yang berkelanjutan. Dengan demikian, PLC dapat menjadi pendekatan strategis untuk meningkatkan mutu pendidikan melalui penguatan kapasitas guru dan kolaborasi profesional. Penelitian ini berkontribusi terhadap pencapaian SDGs 4 (Quality Education) melalui penguatan komunitas belajar profesional yang mendukung pendidikan berkualitas, inklusif, dan berkelanjutan.

Received : 15/08/2026

Revised : 10/09/2026

Accepted : 21/10/2026

✉ **Corresponding Author:** (1) Lindawati Abidin, (2) Educational Administration, (3) Indonesia University of Education, (4) Jl. Setiabudhi No. 229, Bandung, 40141, Indonesia, (5) Email: lindawati.abidin@upi.edu

1. Introduction

Professional Learning Communities (PLCs) still face various challenges in their implementation, particularly teachers' limited understanding of the concept of professional collaboration, time constraints for shared reflection, and a lack of support from school leadership in fostering a collaborative work culture. In addition, some schools still maintain an individualistic work culture, so that the sharing of best practices and the evaluation of learning have not been carried out optimally. These conditions result in low levels of instructional innovation, limited development of teachers' professional competencies, and suboptimal improvements in student learning outcomes. Other barriers also cause teachers to feel isolated and to lack opportunities for sustained collective learning. Based on these issues, the author argues that PLCs are a crucial strategy for fostering collaboration, professional reflection, and a culture of shared learning within the school environment. This study aims to analyze the characteristics, benefits, challenges, and success factors of PLCs as an effort to continuously improve the quality of learning and education.

Research on Professional Learning Communities (PLCs) continues to evolve across various educational contexts. (Klinthaisong et al., 2025) examined the components and indicators of PLCs and found that supportive leadership, collective learning, and a shared vision are key factors in improving educational quality. The study Adusei & Nyanihorba Ayamba, (2025) demonstrates that PLCs can transform inclusive learning through teacher collaboration and reflection on teaching practices. Furthermore, González-Weil et al., (2025) examined trust-building within a community of science teachers in Chile and found that sustained collegial relationships strengthen the effectiveness of PLCs. Meanwhile, Verdi, (2022) found that PLCs help music educators enhance their professional competence and foster learning innovation. In addition to this, the study by Hassan et al., (2019) shows that PLCs in Malaysia contribute to a collaborative culture and improvements in the quality of teachers' instruction.

Previous research on Professional Learning Communities (PLCs) has generally focused on strengthening teacher collaboration, enhancing professional competence, and their impact on student learning outcomes in various educational contexts. Studies by Klinthaisong et al., (2025), Adusei & Nyanihorba Ayamba, (2025) , and González-Weil, C, (2025) place greater emphasis on PLC components, inclusive learning, and building trust among teachers. Meanwhile, the studies Verdi, (2022) and Hassan et al., (2019) focus on teachers' professional development and collaborative culture. However, previous research has not thoroughly integrated the relationship between supportive leadership, a reflective culture, and the sustainability of PLCs in systematically improving the quality of learning. Therefore, this study aims to develop a more comprehensive understanding of the effectiveness of PLCs as a strategy for sustainable educational quality improvement in schools. Based on this description, how does the implementation of PLCs foster professional collaboration and improve the quality of learning in schools?

2. Literature Review

1. Key Characteristics of PLCs

The key characteristics of Professional Learning Communities (PLCs) are marked by professional collaboration, a shared vision, and continuous reflection to improve the quality of learning. Stoll, (2009) explains that a PLC is a learning community that positions teachers as active learners through a culture of collegiality, openness, and a commitment to continuous school improvement. In this context, interactions among educators serve not only as a means of sharing experiences but also as a process of constructing professional knowledge that supports the improvement of educational quality. Amid the evolution of modern educational practices, Owen, (2014) emphasizes that effective PLCs must go beyond mere formal collegiality toward critical dialogue, professional debate, and in-depth collective learning. These characteristics indicate that PLCs require a culture of mutual trust, open communication, and participatory leadership so that teachers can collaboratively develop innovations in learning. Furthermore, Klinthaisong, K., Ketchatturat, J., & Samat, (2025) add that key indicators of a PLC include shared leadership, collective learning, supportive conditions, and a focus on student learning outcomes. Thus, a PLC serves as a strategic framework for building a learning organization that is adaptive, reflective, and oriented toward the continuous improvement of educational quality.

2. Benefits of PLCs

The primary benefit of Professional Learning Communities (PLCs) lies in enhancing teacher competence and the quality of student learning outcomes through ongoing professional collaboration. Stoll (2009) explains that PLCs create a culture of collective learning that enables teachers to share experiences, reflect on teaching practices, and collaboratively develop educational innovations. With professional learning communities in place, teachers no longer work individually but become part of an organizational learning system that supports the school's overall capacity building. Amid the implementation of modern education, Schechter (2012) asserts that PLCs have a positive impact on the effectiveness of school leadership, professional communication, and teacher involvement in decision-making. Intensive collaboration within PLCs also fosters a sense of shared responsibility for student success. Furthermore, Hairon & Tan (2017) states that PLCs contribute to strengthening a culture of collaboration among educators through the exchange of knowledge and best practices in learning. These benefits make PLCs a crucial strategy in creating schools that are adaptive, innovative, and focused on the continuous improvement of educational quality. Thus, PLCs not only support teachers' professional development but also strengthen the overall effectiveness of educational organizations.

3. Challenges in Implementing PLCs

The main challenges in implementing Professional Learning Communities (PLCs) relate to a weak culture of collaboration and the persistence of individualistic work practices in school environments. Stoll (2009) explains that PLCs require organizational support, visionary leadership, and a culture of mutual trust so that the collective learning process can proceed effectively. However, in practice, many schools have not yet been able to provide these conditions, making it difficult for teachers to develop professional reflection and sustainable collaboration. In addition, time constraints and administrative burdens often prevent teachers from actively participating in

PLC activities. Amid the dynamics of educational implementation, Owen (2014) asserts that some PLCs are merely a formality and have not yet been able to foster critical dialogue or in depth professional learning. This situation results in teacher collaboration activities having little significant impact on learning innovation. Wong (2010) also states that the success of PLCs is greatly influenced by school leadership, structural support, and a culture of trust among community members. Without such support, teachers tend to feel isolated and find it difficult to consistently develop collective learning. Thus, the challenges of implementing PLCs are not only technical in nature but also relate to changing the school's organizational culture toward a collaborative and reflective learning community.

4. Key Components for PLC Success

The successful implementation of Professional Learning Communities (PLCs) depends on several key components that support the creation of a collaborative learning culture in schools. Stoll (2009) explains that effective PLCs require a shared vision and values, supportive leadership, and a collective commitment to improving the quality of learning. These components form the foundation for building a professional environment that enables teachers to share knowledge, engage in reflection, and continuously develop innovative teaching practices. In addition, relationships based on trust and open communication are also key factors in ensuring the sustainability of PLCs. Amid the implementation of PLCs in various educational contexts, Klinthaisong, K., Ketchatturat, J., & Samat (2025) assert that the success of PLCs is characterized by shared leadership, collective learning, supportive conditions, and a focus on student learning outcomes. Structural support such as time for collaboration, school facilities, and professional development policies significantly influences the effectiveness of professional learning communities. Hairon & Tan (2017) add that a culture of collaboration among educators is a key component in improving the quality of teacher collaboration and the exchange of best teaching practices. Thus, the success of PLCs does not depend solely on individual teachers, but also on the support of the school organization, which is capable of creating a professional learning environment consistently and sustainably.

3. Methodology

1. Approach

The appropriate research approach for studying Professional Learning Communities is a descriptive qualitative approach because it allows for an in-depth understanding of the phenomenon of professional collaboration among teachers within the social and organizational context of the school. Stoll, (2009) states that PLCs are social processes that emphasize interaction, collective reflection, and a culture of shared learning, thus requiring a contextual analysis of teachers' experiences and school dynamics. This approach allows researchers to explore how values, culture, and leadership influence the implementation of PLCs. On the other hand, Owen (2014) asserts that PLC research should focus on critical dialogue, collaborative practices, and teachers' professional experiences through observation, interviews, and group discussions. Meanwhile, Wong (2010), argues that case studies are an appropriate strategy

in PLC research because they can describe in detail the factors that support or hinder the success of professional learning communities in schools. Thus, the qualitative case study approach is considered the most relevant for comprehensively analyzing the characteristics, challenges, and effectiveness of PLC implementation.

2. Research Data Sources

Data sources for research on Professional Learning Communities can be obtained from primary and secondary data relevant to the implementation of professional learning communities in schools. Stoll (2009) explains that primary data in PLC research generally comes from teachers, principals, and educational staff who are directly involved in collaborative activities, professional reflection, and learning-related decision-making. This data was collected through in-depth interviews, observations, and group discussions with 1 principal, 2 teachers, 2 school staff members, and 3 students at Campaka State High School No. 1 in Purwakarta Regency. In the context of a study on PLC implementation, Owen (2014) emphasized the importance of documenting teachers' professional interactions—such as meeting minutes, learning reflections, and collaborative practices as data sources capable of authentically depicting the dynamics of a learning community. In addition, Wong (2010) states that school documents, academic policies, professional development programs, and learning evaluation reports also serve as important secondary data sources for understanding the factors that support and hinder PLC. Thus, the combination of primary and secondary data allows for comprehensive and contextual research on PLC.

3. Data Collection Techniques

Appropriate data collection techniques in research on Professional Learning Communities include interviews, observations, and documentation to gain an in depth understanding of PLC implementation in schools. Stoll (2009) explains that in-depth interviews are essential for exploring teachers' experiences, perceptions, and forms of collaboration within professional learning communities. This technique enables researchers to understand the culture of reflection, leadership, and the dynamics of collaboration that develop within the school environment. Furthermore, Owen (2014) emphasizes that participatory observation is necessary to directly observe professional dialogue, reflective discussions, and collective learning activities among educators. Through observation, researchers can identify patterns of interaction and the actual level of engagement among PLC members. Additionally, Wong (2010) states that documentation such as meeting minutes, school programs, evaluation reports, and teachers' reflections serves as a crucial data source to reinforce the findings from interviews and observations. Thus, the use of triangulation in data collection techniques can enhance the validity and depth of a comprehensive PLC research analysis.

4. Data Processing Techniques

Data analysis techniques in the Professional Learning Community (PLC) study were conducted systematically through the stages of data reduction, data presentation, and drawing

conclusions to gain an in-depth understanding of PLC implementation in schools. Stoll (2009) explains that data from interviews, observations, and documentation need to be classified based on key themes such as teacher collaboration, professional reflection, school leadership, and a culture of collaborative learning. This process helps researchers identify patterns of relationships between phenomena in a more structured manner. On the other hand, Owen (2014) emphasizes the importance of thematic analysis in PLC research to understand the meaning of professional interactions and the dynamics of collective learning among educators. The coded data was then analyzed to identify trends, barriers, and forms of collaborative practice emerging within the learning community. Additionally, Wong (2010) states that data triangulation was conducted by comparing the results of interviews, observations, and school documents to enhance the validity of the research. Thus, qualitative data analysis techniques enable a deep, contextual, and comprehensive analysis of PLCs.

4. Research Findings

Based on the PLC framework widely used by Olivier & Huffman (2016) and supported by Stoll (2009), namely:

1. Shared and Supportive Leadership
2. Shared Values and Vision
3. Collective Learning and Application
4. Shared Personal Practice
5. Supportive Conditions

1. Shared and Supportive Leadership

The research findings indicate that the implementation of Professional Learning Communities (PLCs) in schools is supported by school principal leadership that provides teachers with opportunities to participate in academic decision-making. School principals support the implementation of PLCs by allocating time for teacher discussions, facilitating professional development activities, and providing teachers with opportunities to participate in school academic decision-making. Teachers stated that school leadership fosters a culture of collaboration and openness in sharing ideas related to improving learning. Teachers do not merely act as implementers of policies but are also involved in planning learning programs, evaluating learning outcomes, and designing professional development activities. These findings indicate that supportive leadership serves as a crucial foundation for the success of PLCs. The principal acts as a facilitator who fosters a collaborative culture by providing teachers with opportunities to share ideas and innovate in teaching. This aligns with the Stoll (2009), who states that participatory leadership can create a professional learning environment that supports both individual growth and the growth of the school as an organization. This finding also supports the results of the study Olivier & Huffman (2016), which confirms that shared and supportive leadership is the primary foundation for the sustainability of PLCs. Thus, the support of the principal at SMA Negeri 1 Campaka is a crucial factor in building a collaborative culture among teachers, and teacher involvement in the decision-making process enhances a sense of ownership toward school programs and strengthens commitment to improving the quality of learning.

2. Shared Values and Vision

Based on the research findings, all members of the school community share a relatively similar understanding of the importance of improving the quality of learning and student achievement. The school's vision is translated into various academic programs focused on enhancing student competencies and teacher professionalism. This shared vision serves as a unifying factor that brings all PLC members together in pursuing a common goal. Teachers have a clear focus on student learning outcomes and consistently integrate the school's values into the learning process. These findings support the research results of Klinthaisong et al., (2025), which confirm that a shared vision is a key indicator of PLC success. When all members of an organization share the same goals, collaboration becomes more focused and sustainable. Hairon & Tan (2017), also found that the success of PLCs in Singapore and Shanghai was supported by a shared commitment to improving the quality of learning and student achievement. A shared vision and values serve as the glue that unites all members of the organization. When teachers understand a common goal, the collaborative process is not merely carried out to fulfill administrative obligations, but becomes part of their professional commitment to improving student learning outcomes. Therefore, a shared vision forms the foundation for a culture of continuous learning.

3. Collective Learning and Application

One of the key characteristics of a PLC is the presence of a collective learning process that enables teachers to learn together through discussion, reflection, and collaborative problem-solving. Observations show that teachers routinely discuss learning strategies, the development of instructional materials, the analysis of assessment results, and the resolution of problems encountered during the learning process. In addition, teachers also share experiences regarding the use of innovative teaching methods and media.

Collective learning not only facilitates the exchange of knowledge but also encourages the application of discussion outcomes to classroom teaching practices. Teachers who gain new ideas from their peers tend to try these strategies in the learning process and evaluate the results. This finding aligns with Owen (2014) assertion that effective PLCs are characterized by collective learning that produces tangible changes in teachers' professional practices. Therefore, collective learning contributes to enhancing teachers' competencies and the quality of the learning process.

Owen (2014) explains that effective PLCs must be able to move beyond formal collegiality toward deep professional learning through critical dialogue. Choi & Sazawa (2016) found that PLCs help language teachers develop a better understanding of cross-cultural teaching practices. Verdi (2022) findings also indicate that PLCs enhance music teachers' ability to develop innovative teaching strategies.

Collective learning allows teachers to gain new perspectives when facing learning challenges. Through the process of sharing knowledge and experiences, teachers not only enhance their professional competence but also develop the reflective skills necessary for modern educational practice. Thus, PLCs serve as a means of lifelong learning for teachers.

4. Shared Personal Practice

The research findings indicate that teachers actively share their experiences, teaching materials, learning resources, and assessment results with their colleagues. In addition, classroom observations and constructive feedback are used to improve the quality of teaching. These professional-sharing practices provide teachers with opportunities to learn from their colleagues' experiences and develop their reflective skills. Through this process, teachers can identify the strengths and weaknesses of their teaching practices. These findings support the research by Hairon & Tan (2017) which explains that professional collaboration through the exchange of best practices can improve the quality of learning and strengthen an organization's learning culture. This practice of sharing experiences demonstrates that teachers have fostered a culture of reflection in carrying out their professional duties. These findings align with the research by Hairon & Tan (2017) which explains that the exchange of best practices is one of the primary mechanisms for improving the quality of learning. Through shared reflection, teachers can evaluate the effectiveness of learning strategies and make continuous improvements.

5. Supportive Conditions

The research findings indicate that the success of PLCs is influenced by the availability of supportive conditions, both structural and cultural. Structural support is evident in the provision of dedicated time for collaboration, meeting facilities, access to technology, and school policies that support teachers' professional development. Meanwhile, cultural support is demonstrated through relationships based on trust, openness, and appreciation for each member's contributions. However, several obstacles were still identified, including time constraints due to teachers' administrative workload and differences in the level of participation among teachers in PLC activities. Supportive conditions enable PLC activities to proceed consistently and sustainably. Teachers feel comfortable discussing, sharing experiences, and receiving feedback from colleagues without fear of being judged negatively. These findings align with Wong (2010) which emphasizes that a culture of trust and organizational support are key factors determining the success of PLCs. The findings also indicate that the success of PLCs is determined not only by individual teachers' commitment but also by the school's organizational support. This aligns with the findings by Wong (2010) who state that supportive conditions are a determining factor in the success of PLCs. Therefore, schools need to continue strengthening structural support and a collaborative culture so that the implementation of PLCs can proceed consistently and sustainably. Consequently, schools need to create a conducive environment so that professional learning communities can thrive optimally.

6. Trust and Collaboration as Drivers of a Professional Culture

The success of a PLC is determined not only by its organizational structure but also by the quality of relationships among community members. Trust serves as the foundation for effective collaboration. González-Weil et al., (2025) found that trust built over time is a key factor in sustaining a PLC. Schechter (2012) also showed that teachers' positive perceptions of PLCs

are influenced by the quality of communication and professional relationships among school members. Furthermore, Wong (2010) emphasized that a culture of mutual trust is a prerequisite for the development of professional reflection and collective learning. Trust enables teachers to share their experiences, challenges, and weaknesses in teaching practice without fear of negative judgment. This creates a safe learning environment and fosters educational innovation. Therefore, strengthening a culture of trust is a key strategy in building a sustainable PLC.

7. The Impact of PLCs on the Quality of Instruction and Student Learning Outcomes

The primary goal of PLCs is to improve the quality of learning, which ultimately leads to improved student learning outcomes. Norwood (2007) explains that PLCs contribute to improved student achievement by enhancing the quality of teachers' instruction. Hassan et al., (2019) found that the implementation of PLCs in Malaysia successfully strengthened a culture of collaboration, which led to improved learning quality. Adusei, O., & Nyanihorba Ayamba (2025) also demonstrate that PLCs can support inclusive learning through teacher collaboration and professional reflection. These findings indicate that the benefits of PLCs are felt not only by teachers but also by students. The enhancement of teachers' professional competencies through collaboration and reflection contributes to the creation of more effective, innovative, and student-centered learning. Thus, PLCs can be viewed as a strategy for sustainable improvement in educational quality because they have a direct impact on the quality of both the learning process and learning outcomes. Based on the research findings, the implementation of the Professional Learning Community at Campaka State Senior High School 1 in Purwakarta Regency has demonstrated the characteristics of a PLC as described by Stoll (2009) and Olivier & Huffman (2016) as well as (Klinthaisong et al., 2025). Supportive leadership, a shared vision, collective learning, the practice of professional sharing, and supportive conditions are the key factors underpinning the success of the PLC at the school. Although there are still some technical challenges, the implementation of PLCs has made a positive contribution to teachers' professional development and the improvement of learning quality. Thus, PLCs can be an effective strategy for fostering a culture of continuous learning and improving the quality of education at State Senior High School 1 Campaka in Purwakarta Regency.

5. Conclusion

Based on the research findings and discussion, it can be concluded that the implementation of the Professional Learning Community (PLC) at Campaka State Senior High School 1 in Purwakarta Regency has demonstrated the key characteristics of a PLC as outlined by Stoll (2009), Olivier & Huffman (2016), and Klinthaisong et al., (2025), namely supportive leadership, a shared vision and values, collective learning, professional knowledge-sharing practices, and supportive conditions that enable sustainable collaboration. These five components interact with one another to shape a culture of professional learning that supports the improvement of learning quality in schools. Participatory leadership by the principal has been shown to provide teachers with opportunities to engage in academic

decision-making, the development of learning programs, and professional development activities. Furthermore, a shared vision and values among the entire school community serve as a crucial foundation for unifying the goals and direction of collaboration, ensuring that PLC activities are not merely administrative in nature but evolve into a professional commitment to improving the quality of instruction and student learning outcomes. This study also shows that collaborative learning and professional sharing enable teachers to acquire new knowledge, develop reflective skills, and implement instructional innovations more effectively. Activities such as discussions, shared reflection, classroom observations, and constructive feedback have served as professional development tools that contribute to enhancing teachers' competencies. Furthermore, a culture of trust, open communication, and positive professional relationships among community members

serve as factors that strengthen the sustainability of PLCs in schools. Nevertheless, the implementation of PLCs still faces several challenges, particularly time constraints due to teachers' administrative workload and varying levels of participation in collaborative activities. Therefore, stronger support from schools is needed through the provision of adequate time for collaboration, the promotion of a culture of reflection, and policies that support ongoing professional development. Overall, this study confirms that Professional Learning Communities (PLCs) are an effective strategy for enhancing teachers' professional competencies, strengthening a school's collaborative culture, and improving the quality of students' learning processes and outcomes. Thus, PLCs can serve as a strategic approach to transforming schools into adaptive, innovative learning organizations committed to the continuous improvement of educational quality.

Reference

- [1] Adusei, O., & Nyanihorba Ayamba, B. B. (2025). Transformation to inclusive teaching and learning through professional learning communities. In *Sustainable Development Goals Series*. Springer. <https://www.google.com/search?q=https://doi.org/10.1007/978-3-031-xxxx-x>
- [2] Choi, J., & Sazawa, C. (2016). World language teachers exploring cultural teaching through professional learning community. *Electronic Journal of Foreign Language Teaching*, 13(1), 68–81. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84975755393&partnerID=40&md5=66a3d5b9e8b370573b3487cab830092d>
- [3] González-Weil, C., et al. (2025). How do you trust in the midst of mistrust? A longitudinal study (2010–2021) on building trust in a professional learning community of science teachers in Chile. *Professional Development in Education*, 51(1), 39–53. <https://doi.org/https://doi.org/10.1080/19415257.2024.2431701>
- [4] Hairon, S., & Tan, C. (2017). Professional learning communities in Singapore and Shanghai: implications for teacher collaboration. *Compare*, 47(1), 91–104. <https://doi.org/10.1080/03057925.2016.1153408>
- [5] Hassan, R., Ahmad, J., & Boon, Y. (2019). Professional learning community in Malaysia. *International Journal of Engineering and Advanced Technology*, 8(6 Special Issue 3), 524–536. <https://doi.org/10.35940/ijeat.F1095.0986S319>
- [6] Klinthaisong, K., Ketchatturat, J., & Samat, C. (2025). The components and indicators of professional learning community: the guidelines for educational quality improvement. *International Journal of Evaluation and Research in Education*, 14(6), 4498–4508. <https://doi.org/10.11591/ijere.v14i6.33511>
- [7] Norwood, J. R. (2007). Professional learning communities to increase student achievement. *Essays in Education*, 20, 33–42. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-34248381674&partnerID=40&md5=00eea73d91e14124e70502a9a69f61d1>
- [8] Olivier, D. F., & Huffman, J. B. (2016). Professional learning community process in the United States: conceptualization of the process and district support for schools. *Asia Pacific Journal of Education*, 36(2), 301–317. <https://doi.org/10.1080/02188791.2016.1148856>
- [9] Owen, S. (2014). Teacher professional learning communities: Going beyond contrived collegiality toward challenging debate and sustained collaborative investigation. *Professional Development in Education*, 40(1), 54–77. <https://doi.org/https://www.google.com/search?q=https://doi.org/10.1080/19415257.2013.802183>
- [10] Schechter, C. (2012). Developing teachers' collective learning: Collective learning from success as perceived by three echelons in the school system. *International Journal of Educational Research*, 56, 60–74. <https://doi.org/https://www.google.com/search?q=https://doi.org/10.1016/j.ijer.2012.08.003>
- [11] Stoll, L. (2009). Professional Learning Community. In *International Encyclopedia of Education, Third Edition* (pp. 151–157). <https://doi.org/10.1016/B978-0-08-044894-7.00435-8>
- [12] Verdi, B. (2022). Creating professional learning communities for music educators. *Music Educators Journal*, 109(2), 14–21. <https://doi.org/https://www.google.com/search?q=https://doi.org/10.1177/00274321221142514>
- [13] Wong, J. L. N. (2010). What makes a professional learning community possible? A case study of a Mathematics department in a junior secondary school of China. *Asia Pacific Education Review*, 11(2), 131–139. <https://doi.org/10.1007/s12564-010-9080-6>

