KENAN FELLOWS PROGRAM FOR TEACHER LEADERSHIP NC STATE

Journal of Interdisciplinary Teacher Leadership 2025, Vol. 8, No. 1, pp. 109-138

Teacher Insight into Implementation of Sustainable Professional Learning Communities in Ghanaian Secondary Schools

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Abstract

This study examined teachers' perspectives on the implementation of sustainable Professional Learning Communities (PLCs) in secondary schools in Ghana. It focuses on the challenges teachers encountered in implementing PLCs and the strategies that supported their success in professional development. The study employed a descriptive survey design grounded in Communities ofPractice Theory. A quantitative research approach was used, guided by the principles of the positivist paradigm. The sample included 100 participants randomly selected from 10 secondary schools in the Ashanti Region. A structured questionnaire with closed-ended questions was administered, focusing on three key areas: teachers' views on the relevance of PLCs, challenges in integrating PLCs into school practices, and strategies for their successful establishment and long-term sustainability. Descriptive statistics, including mean, standard deviation, kurtosis, and rank, were used to analyze the collected data. The findings indicate that many teachers feel inadequately prepared to implement PLCs effectively. The data revealed insufficient administrative support. In this regard, teachers rated school leadership's involvement and resource allocation poorly, while workload and insufficient training emerged as significant concerns. Based on these findings, it could be recommended that future research could explore the role of school culture and leadership styles in fostering collaborative learning environments. Additionally, administrators need adequate training and resources to effectively support PLC initiatives and cultivate a collaborative culture. Furthermore, policymakers should focus on developing comprehensive training programs that equip teachers with the essential skills and knowledge to implement PLCs successfully.

Keywords: *Education policy and leadership, Organisational culture, Ghana, Professional Learning Communities, Professional development,*

Professional learning communities (PLCs) are recognized in the Ghanaian secondary education system as a means to improving teaching practices. PLCs

are known as groups of educators who regularly meet to collaborate, share expertise, and work together to improve their teaching practices (Hudson, 2024). These communities foster collaboration among teachers and provide a supportive environment for continuous professional development. They also play a vital role in enhancing student learning outcomes. In Ghana, the success of PLCs is influenced by various factors, including cultural context, educational policies, and community involvement (Korku, 2025). Understanding teachers' perspectives is essential to understanding how PLCs function and how they can address challenges within the country's education system. Baba and Acquah (2024) found that economics teachers who participated in PLCs experienced increased self-efficacy and confidence in their teaching abilities. This supports the view that PLCs can positively enhance teaching quality.

Dampson (2021) contends that professional learning communities (PLCs) in Ghanaian schools should be analysed through the lens of socio-cultural theory. The reason could be attributed to the fact that teachers' success is shaped by the social and cultural contexts in which they are implemented. This highlights the need to incorporate local traditions and educational practices when designing professional learning initiatives. PLCs also play a significant role in improving schools' management. This is evident in a study conducted by Quansah and Yamoah (2024) emphasizing that communities can positively influence school practices, especially when schools engage local stakeholders. In rural areas, where educational resources may be limited, community-based approaches to PLCs can enhance their effectiveness.

For instance, in the Ashanti Region of Ghana, culturally responsive pedagogy is crucial for the success of PLCs. Anlimachie et al. (2025) and Mpuangnan and Ntombela (2024) emphasize the need to consider local cultural contexts, ensuring that teaching practices align

with the community's values and traditions. However, in this region, the implementation of PLCs is challenged by several factors. Banson (2022) notes that limited resources, insufficient teacher training, and a lack of adequate support from educational authorities present significant barriers to achieving quality education. This implies that the success of PLCs depends on both the dedication of individual teachers and the active involvement of the community and educational leaders.

In view of the foregoing paragraphs, this study seeks to make a unique contribution to the global literature on PLCs by focusing specifically on the experiences of teachers in Ghanaian secondary schools in Kumasi. It draws attention to how local cultural values, institutional conditions, and education policies influence the way PLCs are practiced in Ghana. This perspective provides understanding from a developing country context, enriching international discussions on how PLCs can be adapted to diverse educational settings. The localized lens adds depth and relevance to conversations around teacher professional development globally.

Research Objectives

i. To assess the perceptions of teachers regarding the effectiveness and relevance of Professional Learning Communities (PLCs) in senior high schools.
ii. To determine the challenges faced by teachers in integrating PLCs into senior high school settings.
iii. To evaluate the strategies and practices that can ensure the long-term sustainability of PLCs in Ghanaian senior high schools.

Literature Review

A Review of Professional Learning Communities (PLCs)

Professional Learning Communities (PLCs) are collaborative groups of teachers who work together to enhance their teaching practices and improve student learning. Hudson (2024) emphasizes that effective PLCs focus on teamwork, continuous learning, and shared educational goals. Moosa et al. (2024) further define PLCs as structured environments where teachers engage in reflective discussions and exchange ideas to foster professional growth. Similarly, Christensen (2024) highlights the global significance of PLCs, noting that they play a crucial role in shaping educational outcomes across different systems. These studies collectively indicate that PLCs provide essential support for both educators and students.

However, some researchers argue that the effectiveness of PLCs varies depending on the school environment. Ansari and Asad (2024) examined PLCs in Pakistan and found that leadership styles and cultural factors significantly influence their success. Likewise, Christensen and Jerrim (2025) conducted a cross-national analysis and discovered that government policies and teacher autonomy affect how PLCs function in different educational settings. These findings suggest that while PLCs are beneficial, their implementation must be adapted to the specific needs of schools and educational systems.

The leadership and organization of PLCs also play a critical role in their effectiveness. Plank et al. (2024) found that leadership styles influence how well teachers collaborate within PLCs. Denee (2024) introduced the concept of a "network PLC," where educators engage in both individual and collective learning, enhancing professional development. These studies highlight that for PLCs to be truly effective, they must be well-structured and supported by strong leadership that encourages meaningful collaboration.

Overall, most scholars agree that PLCs contribute to professional development and improved student learning outcomes. However, Lee et al. (2022) note the challenges in

measuring their effectiveness due to variations in implementation. Antinluoma et al. (2021) emphasize that for PLCs to succeed, educators must consistently apply best practices. While PLCs offer significant benefits, schools must consider their unique contexts and challenges to ensure successful implementation.

PLCs are widely recognized as beneficial for teacher development and student learning, and their effectiveness depends on contextual factors such as leadership styles, cultural influences, and policy environments (Ansari & Asad, 2024; Christensen & Jerrim, 2025). Secondary schools have unique organizational structures, student needs, and resource constraints that can affect how PLCs function. Furthermore, challenges in consistently applying best practices and measuring PLC outcomes (Lee et al., 2022; Antinluoma et al., 2021) remain underexplored in this setting. Therefore, research specifically targeting PLC implementation, adaptation, and impact in secondary schools is needed to fill this gap and provide actionable insights for improving educational quality in these institutions.

Professional Learning Communities (PLCs) in Ghana

Professional Learning Communities (PLCs) play a significant role in fostering collaboration among teachers, enhancing professional development, and improving student learning outcomes. Dampson (2021) highlights that in Ghanaian basic schools, PLCs promote teamwork and knowledge sharing, contributing to more effective teaching. Baba Yidana and Yaw Sekyi Acquah (2024) further emphasize that economics teachers who actively engage in PLCs develop greater self-efficacy and confidence in their teaching abilities. Similarly, Ayilimba et al. (2025) demonstrate that PLCs positively influence science teachers' instructional and assessment practices. These findings indicate that PLCs can be instrumental in improving education in Ghana.

Despite their potential benefits, the implementation of PLCs in Ghana faces several challenges. Suglo et al. (2024) observe that although many teachers are willing to participate in PLCs, factors such as excessive workloads and limited resources hinder their involvement. Kusi and Antwi (2025) highlight that headteachers in the Effutu Municipality encounter difficulties in establishing PLCs due to inadequate support structures and resistance from teachers. Additionally, Soares and Galisson (2021) note that across Sub-Saharan Africa, cultural and systemic barriers often impede the successful operation of PLCs. These challenges suggest that while PLCs offer valuable opportunities for professional growth, their success depends on overcoming significant obstacles.

To address these challenges, stronger support systems and structured policies are necessary. Mpuangnan (2024) argues that well-designed professional development programs can enhance PLC effectiveness by providing teachers with essential resources and guidance. Warmoes et al. (2025) found that well-supported PLCs contribute not only to teacher development but also to improved school performance and student achievement. These insights underscore the importance of sustained institutional support in ensuring the success of PLCs.

While the benefits of PLCs are well-documented globally, there is limited empirical research exploring how PLCs are practically implemented and sustained within the specific cultural, institutional, and resource-constrained contexts of Ghanaian secondary schools. Most existing studies, such as those by Dampson (2021) and Ayilimba et al. (2025), focus on basic schools or specific subjects, leaving a gap in understanding how secondary school teachers across disciplines engage with PLCs. Furthermore, challenges such as inadequate support, teacher resistance, and leadership constraints (Suglo et al., 2024; Kusi & Antwi, 2025) remain underexplored, particularly regarding their impact on the long-term success of PLCs.

Therefore, more research is needed to investigate how these factors uniquely influence the development, participation, and outcomes of PLCs in Ghanaian secondary education, which can inform more effective and localized strategies for professional development.

Strategies for Ensuring the Sustainability of PLCs

The sustainability of Professional Learning Communities (PLCs) depends on strong leadership, collaboration, and institutional support. Truong et al. (2025) emphasize that when key stakeholders, such as school leaders, teachers, and policymakers, actively participate, PLCs are more effective and enduring. In Ghana, Kusi and Antwi (2025) found that headteachers require adequate support to sustain PLCs, as they often face challenges such as resistance to change and limited resources. Similarly, Ren et al. (2025) highlight that a cooperative and supportive environment fosters teacher engagement in PLCs. These findings suggest that leadership and teamwork play a crucial role in maintaining PLCs over time.

Another essential factor in sustaining PLCs is having clear objectives and structured collaboration. Moosa et al. (2024) argue that effective PLCs are characterized by well-defined plans, continuous professional development, and a focus on collaborative problem-solving. Tanghe et al. (2024) add that inter-school networks of school leaders provide valuable opportunities for professional growth and contribute to PLC sustainability. However, Soares Jones (2024) cautions that overly rigid structures may reduce effectiveness, particularly in diverse educational settings. This indicates that while structure is important, PLCs should remain adaptable to meet the evolving needs of educators and learners.

A culture of continuous learning and reflection is also key to sustaining PLCs. Antinluoma et al. (2021) state that when teachers regularly reflect on their teaching practices and share insights with colleagues, PLCs remain active and impactful. Carr (2024) found that PLCs enhance teacher retention by providing professional support and reducing job-related

stress. Diao (2025) further demonstrates that PLCs are effective beyond traditional schools, as they also help librarians improve their instructional skills. These studies highlight the importance of fostering a learning-oriented culture to ensure the longevity of PLCs.

Despite these strategies, challenges persist in maintaining PLCs. Truong et al. (2025) and Kusi and Antwi (2025) warn that without supportive school policies and long-term investment, PLCs may struggle to remain effective. Ren et al. (2025) also point out that heavy workloads and competing responsibilities can hinder teachers' sustained participation in PLCs. However, with strong leadership, collaborative efforts, and a commitment to ongoing professional learning (Mpuangnan et al., 2024), PLCs can continue to provide long-term benefits to educators and the education system.

The above discussion demonstrates that the sustainability of PLCs is a significant issue in Ghanaian secondary schools due to several interrelated challenges. Effective PLCs require strong leadership, active collaboration, and institutional support, yet many Ghanaian schools struggle with inadequate backing from headteachers who face resistance to change and limited resources (Kusi & Antwi, 2025). Without committed leaders and a cooperative culture, sustaining PLCs becomes difficult. Moreover, while structured collaboration and clear objectives are essential (Moosa et al., 2024), overly rigid frameworks can limit adaptability in diverse school settings (Soares Jones, 2024). Additionally, teachers' heavy workloads impede continuous engagement in PLCs (Ren et al., 2025). This lack of sustained support undermines the potential of PLCs to enhance professional growth and improve student outcomes. Therefore, ensuring sustainability requires addressing leadership gaps, fostering a reflective learning culture, and creating policies that provide long-term support and flexibility tailored to Ghanaian secondary schools.

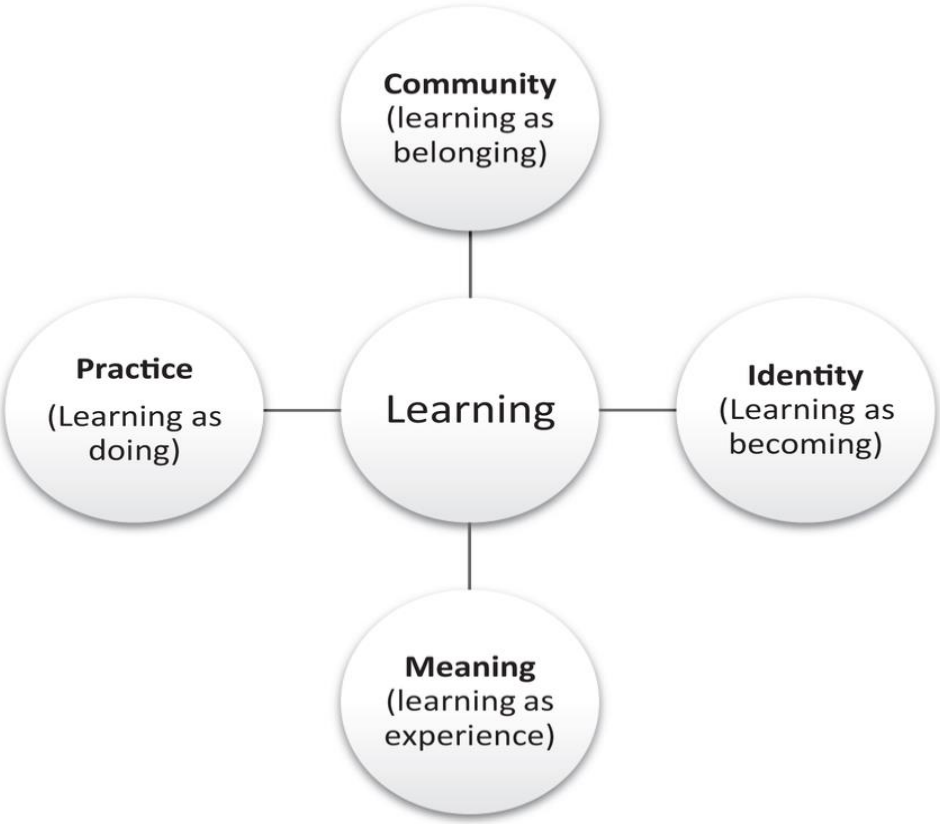
Theoretical Framework

This study was guided by the Communities of Practice Theory (CoPT), developed by Jean Lave and Etienne Wenger (Lave & Wenger, 1991). CoPT emphasizes how learning occurs through social interaction within groups of people who share common interests or professional goals (Farnsworth et al., 2016). According to Lave and Wenger (1991), CoPT consists of five interconnected elements: learning, community, identity, meaning, and practice. Learning occurs through active participation in shared activities; the community provides a social structure for collaboration and support; identity is shaped as individuals engage and develop within the group; meaning is constructed through dialogue and reflection; and practice involves the application of shared knowledge and routines.

In relation to this study, CoPT provides a useful framework for understanding how teachers in Ghanaian secondary schools learn collaboratively within Professional Learning Communities (PLCs). It offers insight into how teachers share experiences, support one another, and collectively improve their instructional practices. Through the application of CoPT, the study captures the dynamic and interactive nature of teacher development fostered by PLCs. Figure 1 illustrates the components of CoPT, adapted from Lave and Wenger (1991).

Figure 1

Components of CoPT adopted by Jean Lave & Etienne Wenger in 1991



Delimitation

This study was limited to secondary schools in the Ashanti Region of Ghana. Additionally, the scope was restricted to professional teachers working within these schools.

Methodology

Research Paradigm

The positivist paradigm was used to guide this study. Positivism is a philosophical approach to research that assumes reality is objective, measurable, and exists independently of human perception (Khanna, 2019). It is grounded in the belief that knowledge is best acquired through empirical observation and scientific methods. Ontologically, positivism asserts that there is a single, observable reality (Pretorius, 2024). Epistemologically, it emphasizes that knowledge must be based on observable and measurable facts, and the researcher should

remain detached and objective (Mayrl & Wilson, 2024). Axiologically, positivism suggests that research should be value-free, minimizing personal biases (Pretorius, 2024). This paradigm typically employs quantitative methods, such as structured surveys or statistical analyses, to explain phenomena.

This paradigm is suitable for the study because it collects measurable data on how teachers engage with and perceive PLCs. For example, the use of measurable standardized questionnaires can help quantify levels of participation, common practices, and perceived benefits or challenges of PLCs. The findings can then be generalized to broader teacher populations, thereby informing educational policy and practice in a structured, evidence-based manner.

Research Approach

In this study, a quantitative approach was used to address the research objectives. A quantitative research approach involves the collection and analysis of numerical data to identify patterns, relationships, or trends within a population (Alford & Teater, 2025). It employs instruments such as structured questionnaires, surveys, and statistical tools to gather measurable data. A key feature of the quantitative approach is its emphasis on objectivity and the ability to replicate findings across different contexts (Fadele & Rocha, 2025).

The quantitative approach is suitable for this study because it allows the researcher to collect data from many teachers across multiple schools. This enables the identification of common practices, levels of participation, and attitudes toward PLCs. The use of numerical data also facilitates comparison of responses and the drawing of general conclusions. However, a limitation of this approach is that it may not capture the deeper personal experiences or motivations behind teachers' participation in PLCs. This limitation should be addressed by future research.

Research Design

This study uses a descriptive survey design to examine the perspectives and practices of stakeholders regarding PLCs in secondary schools in the Ashanti Region of Ghana. Wang and Cheng (2020) describe a descriptive survey as involving the collection of data to test a hypothesis or answer questions concerning the status of a problem. This design is well-suited to the study because it allows for the collection of detailed information on the experiences, challenges, and opinions of teachers, administrators, and other key educational stakeholders, without altering or manipulating any variables. Through this design, an accurate picture can be obtained of how PLCs are currently implemented in these schools, as well as the successes and challenges associated with their integration.

Participants of the Study

In this study, participants were selected from 10 secondary schools in the Ashanti Region using a simple random sampling technique. According to Ahmed (2024), simple random sampling is a research method that gives every individual in the target population an equal chance of being selected. Accordingly, the researcher used random sampling to select 10 professional teachers from each school, resulting in a total sample of 100 participants. The participants consisted of professional teachers with experience in PLCs. This method ensures an unbiased selection process, allowing for diverse perspectives while maintaining a manageable sample size for in-depth analysis.

Instrumentation and Data Gathering Process

To collect relevant data for this study, a structured questionnaire with closed-ended questions was used. The questionnaire was carefully designed to capture key insights related to PLCs in secondary schools in the Ashanti Region. It focused on three main areas: teachers'

perspectives on the relevance of PLCs, the challenges associated with integrating PLCs into school practices, and strategies for ensuring their successful establishment and long-term sustainability.

The questionnaires were distributed to participants in person to improve response rates and ensure clarity in case of any misunderstandings. This approach allowed the researcher to provide immediate clarifications when necessary, ensuring that participants fully understood the questions before responding. Additionally, in-person distribution minimized the risk of delays and non-responses, making data collection more efficient. Participants were given sufficient time to complete the questionnaire, and their responses were collected promptly to facilitate timely analysis.

To ensure validity and reliability, the questionnaire was carefully developed and reviewed by three experienced teachers to refine grammar and ensure it effectively captured key aspects of PLCs. A pilot test was conducted with a small group of teachers to evaluate clarity, consistency, and relevance. Feedback on teachers' perceptions and language accuracy was used to refine the instrument. The reliability of the piloted data was assessed using Cronbach's alpha, which yielded a coefficient of 0.78. According to Edelsbrunner et al. (2025), Cronbach's alpha value of 0.70 or above is generally considered acceptable. This indicates that the instrument used in the study demonstrated an acceptable level of reliability. Additionally, consistency was maintained by personally distributing the questionnaires and providing uniform instructions, ensuring that the instrument yielded reliable and meaningful data.

Data Analysis

In this study, data analysis involved the use of descriptive statistics to effectively summarize the findings. Frequencies and percentages were used to illustrate response distributions, highlighting key trends. The mean and standard deviation provided insights into

central tendencies and variations in teachers' views on PLCs. Kurtosis was applied to assess the shape of the data distribution, determining whether responses were clustered around the mean or widely dispersed. Additionally, ranking was used to prioritize challenges and strategies based on participants' responses. These statistical methods ensured a thorough and structured interpretation of the data, enhancing the study's clarity and reliability.

Research Ethics

The study followed essential ethical guidelines to protect participants' rights and maintain the integrity of the research. Informed consent was obtained from all participants, ensuring they were fully aware of the study's purpose, their involvement, and their right to withdraw at any time without repercussions. Strict confidentiality and anonymity were maintained by omitting personal identifiers during data collection and reporting. Furthermore, the study received approval from the school management to ensure compliance with ethical standards. Participants were treated with respect throughout the process, and all data were securely managed to prevent unauthorized access.

Findings and Discussion

Table 1 presents the demographic data of the respondents, including gender, age, education level, and teaching experience. Regarding gender, most respondents are male, with 83 males (83%) and 17 females (17%). This indicates a substantially higher number of male respondents compared to female respondents in this sample. In terms of age, the largest group of respondents falls between 35 and 44 years old, comprising 42% of the total. The second largest group is between 25 and 34 years, accounting for 29%. Fewer respondents are under 25 years old (19%) or between 45 and 54 years (10%). This suggests that most respondents are in the middle stages of their teaching careers, with a solid level of professional experience.

Regarding education level, most respondents hold a bachelor's degree, with 78% having this qualification. A smaller proportion (22%) hold a master's degree, indicating that while most teachers have completed undergraduate education, some have pursued further studies to enhance their expertise. Finally, the data on teaching experience reveal that a significant portion of respondents have several years of experience. The largest group (43%) has been teaching for six to ten years, followed by 22% with eleven to fifteen years of experience. A smaller percentage (8%) have less than one year of teaching experience. This highlights that most respondents are experienced educators, although there is a smaller group of newer teachers.

Table 1

Demographic data about the Respondents

Category	Frequency (N)	Percentage (%)
Gender		
Male	83	83.0%
Female	17	17.0%
Age		
Under 25years	19	19.0%
25-34years	29	29.0%
35-44years	42	42.0%
45-54years	10	10.0%
Educational level		
Bachelor's degree	78	78.0%
Master's degree	22	22.0%
Teaching experience		
Less than 1year	8	8.0%
1-5years	11	11.0%
6-10years	43	43.0%
11-15years	20	22.0%
16-20years	18	18.0%

Table 2 presents teachers' perspectives on the significance of professional learning communities (PLCs) in schools. Their responses are categorized into four key areas: understanding of PLCs, school support, teacher participation, and the effectiveness of PLCs. Most teachers acknowledged that PLCs are incorporated into their schools' professional

development programs. The highest-rated response indicated that PLCs had been formally introduced in schools, with an average score of 3.93 out of 5. However, fewer teachers believed they had received adequate training on how to implement PLCs effectively (3.41), and even fewer reported a strong understanding of the concept (3.37). This suggests that while PLCs are being introduced in schools, some teachers feel unprepared to utilize them effectively.

Teachers gave lower ratings regarding the level of support and resources available for PLC implementation. While some agreed that school administrators support PLCs (3.30), fewer believed that sufficient time was allocated within the school schedule for PLC activities (2.91) or that school leaders regularly monitored PLC progress (2.78). The lowest rating in this section was for the availability of resources to support PLCs (2.10). These findings indicate that while PLCs are encouraged, many teachers feel that a lack of time, materials, and administrative guidance hinders their effectiveness.

Teachers generally agreed that mutual respect and trust exist among colleagues participating in PLCs (3.33), which is a positive indicator. However, fewer teachers expressed enthusiasm about participating in PLCs (2.93) or reported collaborating regularly to address teaching challenges (2.87). The lowest-ranked response in this category was that participation in PLCs is voluntary (2.54), suggesting that some teachers may feel obligated to take part rather than being intrinsically motivated.

Many teachers recognized the professional benefits of PLCs, with 3.38 agreeing that PLCs contribute to their professional growth and 3.35 stating that PLCs promote collaboration among teachers. Some also noted that PLCs have helped improve teaching practices (3.23) and positively impacted student performance (3.17). While these ratings are relatively high, they suggest that some teachers have yet to experience the full benefits of PLCs in their classrooms.

Table 2

Perspectives of teachers on the relevance of PLCs

S/N	Perceptions of PLC	Mean	Std. dev.	Kurtosis	Rank
	Awareness and understanding of PLCs (x=3.57)				
Au1	PLCs have been formally introduced in my school as part of professional development initiatives.	3.93	.947	-.944	1
Au2	Teachers in my school have received adequate training on how to implement PLCs.	3.41	.958	.438	2
Au3	I am well-informed about the concept of PLCs	3.37	1.052	-.384	3
	Support and Resources for PLC Implementation (x=2.78)				
Sr1	My school administration actively supports the establishment and functioning of PLCs.	3.30	1.032	-.320	1
Sr2	Sufficient time is allocated during the school schedule for PLC activities.	2.91	1.134	-.039	2
Sr3	There is regular monitoring and evaluation of PLC activities by school leaders.	2.78	1.094	-1.141	3
Sr4	The school provides the necessary resources to facilitate PLC activities.	2.10	1.121	-.338	4
	Teacher Engagement and Participation (x=2.91)				
Te1	There is mutual respect and trust among teachers participating in PLCs	3.33	.603	1.604	1
Te2	Teachers in my school are enthusiastic about participating in PLCs.	2.93	.998	-.008	2
Te3	Teachers in my school work collaboratively to address challenges in teaching and learning through PLCs.	2.87	1.040	-.553	3
Te4	Participation in PLCs is voluntary and encouraged by the administration.	2.54	1.115	-.140	4
	Effectiveness of PLC Implementation (x=3.28)				
E1	PLCs in my school contribute to the professional growth of teachers.	3.38	1.203	-.346	1
E2	PLCs have led to improved collaboration and a positive teaching culture.	3.35	.828	-.582	2
E3	The implementation of PLCs has improved teaching practices in my school.	3.23	.984	-.039	3
E4	The implementation of PLCs has positively impacted students' academic performance.	3.17	.934	.088	4

Mean $\geq$*3.0=Agreed*

Table 3 outlines the major challenges in integrating professional learning communities (PLCs) in schools. The challenges are categorized into four key areas: teacher-related difficulties, leadership and administrative barriers, resource and infrastructure constraints, and policy-related obstacles. Teacher-related challenges had a moderate average rating (2.92), with the most significant concern being the heavy workload of teachers, which limits their ability to engage in PLC activities (3.26). Additionally, many teachers reported insufficient training on how to participate effectively in PLCs (2.80), which may hinder their full engagement. A

lack of trust and openness among teachers was also highlighted (2.71), suggesting that collaborative efforts within PLCs may be affected.

Leadership and administrative challenges had a slightly higher average rating (3.12), emphasizing the role of school leadership in supporting PLCs. The most notable issue was the lack of adequate support from school leaders in establishing and sustaining PLCs (3.30). Many teachers also indicated that school leaders rarely allocate dedicated time for PLC meetings (3.10), making consistent participation difficult. Furthermore, the absence of a structured policy framework to guide PLC implementation (2.96) suggests that a lack of clear direction contributes to inconsistencies in how PLCs are adopted across schools.

Resource and infrastructure challenges were the most pressing, with the highest average rating (3.33), underscoring the crucial role of financial and material support in ensuring the success of PLCs. The most significant concern was the lack of financial resources to support PLC activities (3.66). Another major challenge was the absence of external facilitators or experts to guide PLC discussions (3.56), which could limit professional development opportunities for teachers. Additionally, a shortage of essential materials, such as guides or instructional tools (3.43), was noted as a barrier to effective PLC sessions. The lack of designated spaces for PLC meetings (2.68) also emerged as a concern, as it could reduce participation and engagement.

Policy-related challenges received the lowest overall rating (2.10), indicating that while policy gaps exist, they may not be the most immediate concern for teachers. Bureaucratic processes and administrative delays were identified as barriers to PLC implementation (2.16). Teachers also pointed out a lack of district or regional-level workshops for sharing best practices (2.13), which could impact the effectiveness of PLCs. The lowest-rated concern was the perception that the education system does not prioritize PLCs as a key component of

teacher professional development (2.03). While policy support may be limited, other factors, such as leadership and resources, appear to play a more critical role in the success of PLCs.=

Table 3

Challenges faced in integrating PLCs

S/N	Challenges of PLC implementation	Mean	Std. dev.	Kurtosis	Rank
	Teacher-Related Challenges (x=2.92)				
Tr1	The heavy workload of teachers makes it difficult for them to dedicate time to PLC activities.	3.26	1.089	-.927	1
Tr2	Teachers lack adequate training on how to participate effectively in PLCs.	2.80	.873	-.022	2
Tr3	There is a lack of trust and openness among teachers	2.71	1.095	-.574	3
	Leadership and Administrative Challenges (x=3.12)				
La1	School leaders provide insufficient support for implementing and sustaining PLCs	3.30	1.141	-1.401	4
La2	School leaders rarely allocate regular time for PLC meetings within the school	3.10	1.058	.266	5
La3	There is no clear framework or policy to guide the implementation of PLCs in schools	2.96	1.125	-.577	6
	Resource and Infrastructure Challenges (x=3.33)				
Ri1	Schools lack the financial resources necessary to support PLC activities.	3.66	1.067	.458	7
Ri2	Teachers do not have access to external facilitators or experts to guide PLC activities	3.56	1.140	.088	8
Ri3	There is a shortage of materials, such as guides or tools, to facilitate effective PLC sessions.	3.43	1.190	-.439	9
Ri4	Designated spaces for PLC meetings are unavailable in many schools	2.68	1.321	-1.100	10
	Policy-Related Challenges (x=2.10)				
Sp1	Bureaucratic processes and administrative delays hinder the implementation of PLCs in schools.	2.16	1.048	-.213	11
Sp2	There is a lack of district or regional-level workshops to share best practices for PLC implementation.	2.13	1.130	-.418	12
Sp3	The education system does not prioritise PLCs as a critical component of teacher professional development	2.03	1.362	-.891	13

Mean ≥3.0=Agreed

Table 4 outlines strategies for the successful establishment and sustainability of professional learning communities (PLCs) in schools. These strategies are categorized into four main areas: leadership and administrative support, collaboration and professional development, resources and infrastructure, and policy and governmental support.

Leadership and administrative support emerged as the most critical factor, with the highest overall rating (3.59). The most highly endorsed strategy was the need for school leaders to establish policies that prioritize teacher participation in PLCs (3.71), emphasizing the importance of formalizing engagement. Teachers also highlighted the necessity for administrators to actively participate in PLC activities (3.69) to provide guidance and encouragement. Additionally, implementing effective monitoring and evaluation systems (3.56) was seen as essential for assessing PLC effectiveness. Allocating dedicated time for PLC meetings within the school schedule (3.40) was also identified as a necessary step to facilitate participation.

Collaboration and professional development received an overall rating of 3.41, underscoring the role of continuous learning and teamwork in sustaining PLCs. Providing ongoing professional development for teachers within PLCs (3.56) was ranked as the most important strategy in this category, reflecting the need for continuous skills enhancement. Recognizing and rewarding active participation (3.46) was seen as a motivating factor that could encourage greater involvement. Building trust and fostering open communication among teachers (3.38) was also considered essential for promoting collaboration. Additionally, focusing PLC activities on addressing specific teaching and learning challenges (3.24) was suggested as a way to ensure practical and meaningful engagement.

Resources and infrastructure were also viewed as fundamental to PLC sustainability, with an average rating of 3.58. Ensuring access to necessary materials and technology (3.69) was rated as the most essential strategy in this area, highlighting the need for well-equipped PLC sessions. Providing designated spaces for PLC meetings (3.66) was also emphasized as an important factor in facilitating uninterrupted collaboration. The involvement of external experts and facilitators (3.54) was suggested to enhance the depth and quality of PLC

discussions. Additionally, establishing online platforms for virtual PLCs (3.44) was recognized as a valuable strategy for extending participation beyond in-person meetings.

Policy and governmental support, with an average rating of 3.50, was identified as a crucial factor in sustaining PLCs. The highest-rated strategy in this category was ensuring consistent funding and monitoring for PLC initiatives (3.82), underscoring the importance of financial and administrative backing. Organizing workshops and conferences at district and national levels (3.35) was viewed as an effective way to share best practices and strengthen PLC networks. Furthermore, developing national guidelines for PLC implementation and sustainability (3.33) was considered necessary to promote consistency and effectiveness across schools.

Table 4

Strategies for the successful establishment and sustainability of PLCs

s/n	Strategies	Mean	Std. dev.	Kurtosis	Rank
	Leadership and Administrative Support (x=3.59)				
La1	School leaders should establish policies that make participation in PLCs a priority for all teachers	3.71	.940	-.925	1
La2	Administrators should actively participate in PLC activities to provide motivation and direction.	3.69	.985	-1.205	6
La3	Effective monitoring and evaluation systems are necessary to track the progress of PLCs.	3.56	1.058	-.316	7
La4	School heads should allocate regular time for PLC meetings within the academic schedule.	3.40	1.284	-.976	2
	Collaboration and Professional Development (x=3.41)				
Cp1	Teachers should receive ongoing professional development through PLCs.	3.56	1.148	-.322	3
Cp2	Recognising and rewarding active participation in PLCs will motivate teachers to remain engaged	3.46	1.158	-.243	4
Cp3	Encouraging open communication and trust among teachers is critical for fostering successful PLCs.	3.38	.923	.409	5
Cp4	PLC activities should focus on identifying and addressing specific challenges in teaching and learning.	3.24	1.244	-.642	2
	Resources and Infrastructure (x=3.58)				
Ri1	Schools should provide access to necessary materials and technology for effective PLC meetings.	3.69	1.090	-.325	3
Ri2	Designated spaces for PLC meetings should be made available in every school.	3.66	.939	.852	4

Ri3	External experts and facilitators should be invited to guide PLC activities periodically	3.54	1.012	-.037	5
Ri4	Schools should establish online platforms to support virtual PLCs and enhance collaboration	3.44	1.095	-.647	4
	Policy and Governmental Support (x=3.5)				
Pg1	Policymakers should ensure consistent funding and monitoring for PLC initiatives	3.82	.999	-.699	5
Pg2	Regular workshops and conferences on PLC best practices should be organised at the district and national levels.	3.35	.981	-1.064	6
Pg3	The Ministry of Education should develop national guidelines for implementing and sustaining PLCs.	3.33	1.111	-.846	8

Mean $\geq$*3.0=Agreed*

Discussion

The study presents teachers' perspectives on PLCs in schools. It was revealed that teachers agree that PLCs are part of their professional development programs. This finding is consistent with Hudson (2024) and Moosa et al. (2024), highlighting the importance of PLCs in fostering professional growth. However, many teachers feel underprepared to implement PLCs effectively, as reflected in their lower ratings for training and understanding. This supports Christensen (2024), who emphasizes the need for proper teacher preparation.

The data also indicates a lack of strong administrative support, with teachers rating school leadership's involvement and resource allocation poorly. This contrasts with Ansari and Asad (2024), who stress the importance of active leadership in sustaining PLCs, while Plank et al. (2024) argue that leadership is key to PLC success. Furthermore, although mutual respect exists among teachers, enthusiasm for participation and collaboration was lower. This suggests that intrinsic motivation may be lacking, aligning with Christensen and Jerrim (2025), who note that teacher engagement in PLCs can be variable. Thus, while PLCs offer clear benefits, their full effectiveness relies on comprehensive training, active leadership, and motivated teacher participation.

Findings regarding challenges in implementing PLCs in schools were classified under teacher-related difficulties, leadership barriers, and resource constraints, which emerged as the most significant obstacles. Teacher workload and insufficient training are prominent concerns, aligning with Kusi and Antwi's (2025) findings, which highlight the lack of preparedness among educators. Leadership support is also crucial, as many teachers report inadequate administrative backing and insufficient time for PLC activities, resonating with Ayilimba, Tindan, and Dorsah (2025), who emphasize the role of school leaders in sustaining PLCs. Resource-related challenges, such as the lack of financial support and external facilitators, were the most pressing issues, confirming the findings of Soares Jones (2024), who underscores the importance of resources in successful PLC integration. Although policy-related challenges received the lowest rating, it indicates that teachers prioritize immediate concerns like leadership and resources. Researchers such as Esther et al. (2024) and Warmoes et al. (2025) stress that policy frameworks are essential for the long-term sustainability of PLCs. This suggests that addressing leadership and resource gaps is critical for the effective establishment of PLCs, even as policy plays a supporting role.

The data further identified strategies for sustaining PLCs in schools, emphasizing leadership, collaboration, resources, and policy support. The significant role of leadership, particularly through policy development and direct involvement, is supported by Truong et al. (2025), who highlight the necessity of school leaders' active participation in fostering PLCs. This aligns with Kusi and Antwi (2025), who stress that leadership involvement is essential for guiding PLC initiatives. However, some argue that leadership alone cannot guarantee success without adequate teacher readiness and professional development (Moosa, Salleh, & Hamid, 2024).

Collaboration is another crucial aspect, with Ren et al. (2025) noting the importance of building trust among teachers. This is reflected in Table 4, where fostering collaboration is considered vital. However, some critics contend that trust and open communication are insufficient if teachers lack the necessary skills and training to engage in PLCs effectively (Antinluoma, Ilomäki, & Toom, 2021). The importance of resources, such as materials and technology, is emphasized in both Table 4 and Carr (2024), who argue that these resources create an environment conducive to PLC activities. Nonetheless, Diao (2025) suggests that material resources alone are not enough without interactive and continuous learning opportunities.

Finally, while policy and government support are critical, consistent funding and policy development were seen as vital strategies. However, bureaucratic challenges and delayed funding, as observed in some Sub-Saharan African contexts (Soares Jones, 2024), could undermine the effectiveness of PLCs. Thus, while the strategies in Table 4 are essential, they must be adapted to the specific context and challenges of each educational setting.

Recommendations

i. National teacher development frameworks should integrate PLCs as a key strategy for professional growth.
ii. Educational researchers should investigate how school culture and systemic barriers impact the effectiveness of PLCs.
iii. School communities should promote a culture of collaboration and mutual respect among teachers.
iv. The Faculty of Education should regularly monitor, and revise PLC-related training based on feedback from practitioners.

v. Education departments should establish structured support systems such as mentorship programs and external facilitators.

Conclusion

The study examines teachers' perspectives on PLCs as a key component of their professional development by identifying the challenges they encounter in implementing them. It also explored the strategies teachers consider crucial for ensuring the sustainability of these communities. The findings showed that teachers recognize the value of PLCs as part of their professional development. However, the implementation of PLCs faces several challenges, including inadequate training, a lack of administrative support, and limited resources. Teachers expressed the need for stronger leadership involvement and clearer guidance from school administrators, as well as more financial and material resources to engage in PLC activities effectively. These findings suggest that while PLCs offer significant benefits, their success is contingent upon addressing these key barriers to enable meaningful participation and engagement.

Additionally, the strategies identified for sustaining PLCs include leadership support, collaboration, resource allocation, and policy backing. These strategies align with the essential elements required for successful PLC implementation. Leadership is crucial for guiding and supporting PLCs, but it must be accompanied by continuous professional development for teachers and a supportive infrastructure. While resources and policy frameworks are important, the study emphasizes that immediate concerns, such as leadership and teacher preparedness, should be prioritized. Addressing these challenges is critical for schools to create a sustainable, collaborative environment for ongoing professional development thereby ensuring the long-term effectiveness of PLCs.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was not supported by any funding.

Institutional Review Board Statement

This study was conducted in accordance with the ethical guidelines set by the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development. The conduct of this study has been approved and given relevant clearance by the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development.

Declaration

The author declares the use of Artificial Intelligence (AI) in writing this paper. In particular, the author used *Grammarly* in *correcting the grammar*. The author takes full responsibility for ensuring proper review and editing of content generated using AI.

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