

PERCEIVED IMPACT OF PROFESSIONAL LEARNING COMMUNITIES ON TEACHERS' PRACTICE IN SECONDARY SCHOOLS IN ANAMBRA STATE.

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Abstract

This study examined the perceived impact of professional learning communities on teachers' practice in secondary schools in Anambra State. The study was guided by three research questions and three hypotheses. Descriptive survey research design was adopted for this study. The population of the study comprised 7248 teachers in the 268 public secondary schools in Anambra State. The sample size for the study was 362 teachers. Proportionate sampling technique was used to determine the sample size. This sampling technique was used to select 5% of the population as the sample size. The instrument used for data collection was a self-structured questionnaire. The instrument was subjected to trial test with 20 teachers in public secondary schools in Enugu State. Cronbach Alpha was used to determine the internal consistency of the instrument. The instrument yielded an average reliability coefficient of 0.803. The researcher was able to administer 322(91.7%) and retrieved 311 correctly filled copies of the questionnaire which is 85.9% return

rate. Mean ratings and standard deviation were used to analyze the questionnaire items. One sample T-test was used to test the hypotheses at 0.05 level of significance. The study found that through peer coaching, teachers have improved instructional delivery, received constructive feedback, and adopted new teaching strategies, while also managing classroom challenges more effectively. Subject-based clusters have strengthened content knowledge, encouraged collaboration, and supported alignment with curriculum trends. Lesson study teams have enhanced lesson planning, reflective practice, and identification of student learning needs. Based on the findings of this study, the study recommended that schools management should institutionalize peer coaching groups, subject-based clusters, and lesson study teams as part of ongoing professional development to enhance instructional delivery, reflective practice, and pedagogical innovation among teachers.

Keywords: Professional Learning Communities, Teachers' Practice, Peer Coaching Groups, Subject-Based Professional Clusters

Introduction

Secondary schools serve as a pivotal educational tier that bridges the foundational knowledge acquired in primary education and the advanced intellectual, vocational, or tertiary pursuits that follow. This stage of education plays a critical role in shaping adolescents' cognitive, social, and emotional development, preparing them to navigate complex societal roles and responsibilities. In most educational systems, secondary schools are expected to offer a broad-based curriculum that fosters not only academic proficiency but also critical thinking, creativity, citizenship, and life skills. In Nigeria, for example, secondary education is structured to provide general education as well as preparatory training for professional and vocational careers. The success of this mandate, however, is largely influenced by various internal and external factors such as school infrastructure, government policies, parental involvement, and notably, the quality of instructional delivery. Central to the effectiveness of secondary schools are the teachers, whose professional practices directly affect students' learning outcomes and educational experiences.

Teachers' practice can be defined as the implementation of pedagogical strategies, classroom management techniques, assessment methods, and reflective practices by teachers in their daily instructional activities (Tait-McCutcheon & Drake, 2015). It includes all aspects of teaching, from lesson planning to student engagement and performance evaluation. Similarly, Nwachukwu and Uzokife (2022) described teachers' practices as several strategies and techniques applicable to effective classroom management. They can also be referred to as those measures, strategies and practices employed by teachers to maintain decorum in the classroom and, as a result, establish a healthy and conducive learning environment for achievement of educational objectives.

Teachers' practices in secondary schools incorporate a range of pedagogical strategies, classroom management techniques, assessment methods, and interpersonal skills that collectively shape the learning environment. These practices are not only reflective of teachers' professional competencies but also indicative of their commitment to student development and curriculum goals. Teachers' ability to adapt instructional methods to suit diverse learning needs, foster inclusive classroom cultures, and use assessment data to inform instruction has been linked to improvements in academic performance and student engagement.

In Anambra State, teachers' practice has shown varying levels of outcomes. Anyaeji (2023) results of the surveyed 638 teachers (out of 6,382 across 263 public schools) showed that teachers widely used instructional monitoring, effective communication, and classroom arrangement strategies. These results underscore a need for interventions aimed at enhancing teachers' professional development and instructional effectiveness. Moreover, Tolu-Kolawole (2023) reported quoting the Teachers Registration Council of Nigeria (TRCN) noted that many Nigerian teachers lack access to continuous professional development and structured collaboration opportunities. Complementing this, a 2024 collaborative professional development study found that 60% of respondents cited insufficient resources, 20% cited time constraints, and 10% cited lack of administrative support as key barriers to collaborative professional growth. These gaps highlight the existing dangers and challenges confronting teachers' practice, such as professional isolation, limited feedback, and inadequate continuous training.

One of the main dangers of inadequate teachers' practice is that it limits the ability of schools to deliver quality education. Poor teaching practices can result in student disengagement, low academic achievement, and high dropout rates (Nwogu, et. al., 2024). Additionally, without proper support systems, teachers may feel professionally isolated and struggle with burnout, reducing their motivation and performance. These challenges emphasize the importance of providing structured professional support through collaborative initiatives. The result of a survey in Anambra East Local Government Area with 120 teachers found that many educators exhibit aggressive behaviors such as shouting or intimidation which significantly discourage pupil participation and demotivate learning (Mbaegbu et al, 2022). In order to solve these challenges, professional learning communities need to be introduced to improve teachers' practices.

Professional learning communities (PLCs) are organized groups of educators who regularly collaborate to reflect on teaching practices, share insights, and work collectively to improve student learning outcomes (Doğan & Adams, 2018). A professional learning community is also known as a group of educators motivated by continuous improvement, collective responsibility, and mutual goal alignment, who engage collaboratively in professional learning to increase educator effectiveness and to improve student outcomes (Prenger, Poortman & Handelzalts, 2019). This is achieved by the educators sharing and critically interrogating their practice in an ongoing, reflective, inclusive, learning-oriented, and growth-promoting way, underpinned by a high level

of collegial trust and a supportive school environment. Another relevant definition by Clark, Pauley and Rich (2023) described PLCs as a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way. This is applicable to teachers' practice in secondary schools, as they highlight the importance of collaboration, reflection, and shared responsibility among educators in fostering effective instructional strategies.

Globally, countries like Finland, Singapore, and Canada have successfully integrated PLCs into their educational systems, resulting in improved teacher performance and student outcomes. In Nigeria, states such as Lagos, have begun to implement PLC models in secondary schools through workshops, teacher peer review systems, and collaborative planning sessions (Ikegbusi & Egwu, 2024). Anambra State, recognizing the potential of PLCs, has initiated efforts to support their implementation by organizing teacher training seminars and creating school-based professional development teams (Eleke, 2025). The state government has also partnered with educational Non-Governmental Organizations (NGOs) to facilitate learning communities in selected pilot schools, aiming to expand these initiatives across all secondary schools. Some of the professional learning communities' practices used for improving teachers include peer coaching groups, subject-based professional clusters and collaborative lesson study teams.

Peer coaching groups involve structured peer observations where teachers critically assess each other's instructional delivery, offering constructive feedback aimed at improving classroom practices (Jarvis et al., 2017). This model enhances reflective teaching and builds a collaborative culture of trust and ongoing professional growth. Closely aligned with this are subject-based professional clusters, which bring together teachers of similar disciplines to engage in curriculum planning, exchange instructional materials, and address shared pedagogical concerns thereby fostering subject-specific capacity development (Denton & Hasbrouck, 2020). Complementing these are collaborative lesson study teams, where educators jointly plan, observe, and evaluate lessons in iterative cycles. This process cultivates deeper pedagogical insights and enriches understanding of student learning dynamics (Melekhina & Barabasheva, 2019).

The professional learning community practices as discussed above appear to enhance teachers' practice by promoting continuous professional development, reducing isolation, and encouraging innovative teaching strategies. For instance, collaborative lesson study has been shown to improve teachers' understanding of subject content and student-centered instruction (Popoola & Falebita, 2019). Peer coaching helps teachers develop reflective skills and adopt evidence-based practices, while mentoring builds teacher confidence and competence (Richit, 2023). These models collectively contribute to creating a culture of excellence and accountability in secondary schools.

The use of professional learning communities in education is supported by several theoretical frameworks. One of the most relevant is the social constructivist theory by Vygotsky, which emphasized the importance of social interaction in learning. PLCs provide an ideal environment for social learning, where teachers co-construct knowledge through dialogue and shared experiences. Another applicable theory is Wenger's (1998) communities of practice theory, which asserts that learning occurs in a community through mutual engagement, shared repertoire, and joint enterprise. These theories validate the role of PLCs in fostering professional growth and effective teaching practices. It is on these bases of improving teachers' practices in Anambra State that this study sought to examine the impact of professional learning communities on teachers' practice in secondary schools in Anambra State.

Statement of the Problem

Teachers in an ideal educational setting consistently engage in collaborative professional learning communities (PLCs) to enhance pedagogical practices, improve student outcomes, and build collective responsibility for school improvement. PLCs serve as platforms for reflective dialogue, data-driven decision-making, continuous professional development, and peer support. However, in many secondary schools in Anambra State, the institutionalization and effective implementation of PLCs remain inconsistent and poorly structured. Teachers often work in isolation, lacking opportunities for shared planning, joint problem-solving, and meaningful professional interaction. This fragmentation limits the transfer of innovative instructional strategies and weakens the overall quality of classroom practices. Contributing factors include inadequate administrative support, lack of time allocation within the school schedule, insufficient training on the concept and structure of PLCs, and a prevailing culture that discourages collaborative inquiry. Consequently, many teachers continue to employ outdated, teacher-centered methods that fail to meet the diverse learning needs of students. The disconnect between policy recommendations and practice further exacerbates this problem. Therefore, this study becomes imperative to critically investigate the impact of professional learning communities on teachers' practices in secondary schools in Anambra State.

Research questions

The study was guided by the following research questions:

1. How has peer coaching groups perceived impacted teachers' practice in secondary schools in Anambra State?
2. How has subject-based professional clusters impacted teachers' practice in secondary schools in Anambra State?
3. How has collaborative lesson study teams impacted teachers' practice in secondary schools in Anambra State?

Research Hypotheses

Ho₁: Peer coaching groups have no significant impact on teachers' practice in public secondary schools in Anambra State.

Ho₂: Subject-based professional clusters have no significant impact on teachers' practice in public secondary schools in Anambra State.

Ho₃: Collaborative lesson study teams have no significant impact on teachers' practice in public secondary schools in Anambra State

Research Method

Descriptive survey research design was adopted for this study. The population of the study comprised 7248 teachers in the 268 public secondary schools in Anambra State. The sample size for the study was 362 teachers. Proportionate sampling technique was used to determine the sample size. This sampling technique was used to select 5% of the population as the sample size. The instrument used for data collection was a self-structured questionnaire. The questionnaire was titled: "Professional learning communities on teachers' practice". It was made up of two sections A and B. Section A contained questions concerning the personal details of the respondents. Section B was divided into three Clusters A to C. Cluster A contained questions concerning the impact of peer coaching groups on teachers' practices in secondary schools. Section B sought for information on the impact of collaborative lesson study teams on teachers' practice in secondary schools; and Cluster C contained questions concerning the impact on subject-based professional clusters impacted on teachers' practice in secondary schools. The three clusters were structured on a four-point rating scale of Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1). Each of the cluster contained 7 items. The instrument was subjected to trial test with 20 teachers in public secondary schools in Enugu State. Cronbach Alpha was used to determine the internal consistency of the instrument. The instrument yielded coefficient reliability scores of 0.802, 0.803 and 0.805 for peer coaching groups, collaborative lesson study teams and subject-based professional clusters respectively. The instrument yielded an average reliability coefficient of 0.803. The researcher administered the copies of the questionnaire to the respondents with the help of three research assistants. The researcher was able to administer 322(91.7%) and retrieved 311 correctly filled copies of the questionnaire which is 85.9% return rate. Mean ratings and standard deviation were used to analyze the questionnaire items. One sample T-test was used to test the hypotheses at 0.05 level of significance. When the P-value was 0.05 and below, the alternative hypothesis was accepted while the null hypothesis was rejected. Conversely, when the P-value is above 0.05, the alternative hypothesis was rejected while the null hypothesis was accepted.

Analyses of Research Questions

Research Question One: How has peer coaching groups impacted teachers' practice in public secondary schools in Anambra State?

Table 1: Mean ratings of the perceived impact of peer coaching groups on teachers' practice in public secondary schools in Anambra State.

S/N	Item Statements	X	SD	Remarks
1	Peer coaching groups have helped me improve my instructional delivery techniques.	2.61	.769	Agree
2	I receive constructive feedback from colleagues through peer coaching sessions.	2.88	.968	Agree
3	Peer coaching has strengthened my ability to reflect on and improve my teaching practices.	2.67	1.07	Agree
4	I have adopted new teaching strategies through my participation in peer coaching groups.	2.79	.887	Agree
5	Peer coaching encourages collaboration and sharing of best teaching practices.	2.66	1.08	Agree
6	Participation in peer coaching groups has increased my motivation to improve professionally.	2.79	1.04	Agree
7	Peer coaching has helped me effectively manage classroom challenges.	2.78	1.01	Agree
Average		2.74	.975	Agree

Table 1 revealed the mean ratings of how peer coaching groups has impacted teachers' practice in public secondary schools in Anambra State. The results indicated that the average mean score ratings of the peer coaching groups and teachers' practice in public secondary schools in Anambra State was 2.74 with corresponding standard deviation of 0.975. The findings indicated that teachers agreed that professional learning communities highly impact teachers practice in secondary schools in Anambra State. This suggests that the application of peer coaching groups has high impact on teachers' practice on public secondary schools in Anambra State.

Research Question Two: How has subject-based professional clusters impacted teachers' practice in public secondary schools in Anambra State?

Table 2: Mean ratings of the perceived impact of subject-based professional clusters on teachers' practice in public secondary schools in Anambra State.

S/N	Item Statements	\bar{X}	SD	Remarks
8	Subject-based professional clusters have improved my subject content knowledge.	2.45	0.903	Agree
9	Participation in subject clusters has enhanced my instructional delivery skills.	2.72	1.103	Agree
10	I regularly implement new teaching strategies learned from cluster meetings.	2.75	1.026	Agree
11	Collaboration within subject clusters has increased my confidence in teaching.	2.73	0.955	Agree
12	Cluster activities have helped me align my teaching with current curriculum trends.	2.69	1.054	Agree
13	I receive constructive feedback from my peers in subject clusters.	2.80	1.021	Agree
14	Cluster-based interactions have improved my classroom management practices.	2.79	1.013	Agree
Average		2.70	1.011	Agree

The results in Table 2 showed the mean rating and standard deviation of the perceived impact of subject-based professional clusters on teachers' practice in public secondary schools in Anambra State. The results indicated that the average mean score ratings of the teachers in secondary schools in Anambra State was 2.70 with corresponding standard deviations of 1.011. The findings showed that subject-based professional clusters highly impact teachers' practice in secondary schools in Anambra State. This suggested that the application of subject-based professional cluster have high impact on teachers' practice in public secondary schools in Anambra State.

Research Question Three: How has collaborative lesson study teams impacted teachers' practice in secondary schools in Anambra State?

Table 3: Mean ratings of the perceived impact of collaborative lesson study teams on teachers' practice in public secondary schools in Anambra State

S/N	Item Statements	\bar{X}	SD	Remarks
15	Collaborative lesson study teams help me improve lesson planning and design.	2.49	0.859	Agree
16	Working in lesson study teams enhances my ability to reflect on teaching practices.	2.76	1.071	Agree
17	I gain valuable insights into student learning through lesson study collaboration.	2.67	1.085	Agree
18	Lesson study participation improves my instructional strategies.	2.65	1.014	Agree
19	Feedback from colleagues during lesson study improves my teaching effectiveness.	2.68	1.082	Agree
20	Collaborative planning leads to better alignment with curriculum goals.	2.70	1.087	Agree
21	I have adopted new pedagogical approaches through lesson study participation.	2.81	1.008	Agree
Average		2.68	1.029	Agree

The results displayed in table 3 revealed the mean ratings of the perceived impact of collaborative lesson study teams on teachers' practice in public secondary schools in Anambra State. The results indicated that the average mean score ratings of the teachers in secondary schools in Anambra State were 2.68 with corresponding standard deviations of 1.029. The findings indicated the collaborative lesson study teams have impact on teachers' practice in secondary schools in Anambra State. This suggested that the application of collaborative lesson study teams have high impact on teachers' practice in public secondary schools in Anambra State

Table of Hypotheses

The study tested the following hypotheses:

Test of Hypothesis One

H₀: Peer coaching groups have no significant impact on teachers' practice in public secondary schools in Anambra State.

Table 4: Summary of the T-Test analysis on Peer coaching groups significantly impacts on teachers' practice in public secondary schools Anambra state.

Variable	N	Mean	Std. Deviation	Std. Error Mean	t	P-Value	Decision
Peer coaching groups have no significant impact on teachers' practice in secondary schools in Anambra State.	311	2.71	0.759	0.04185	64.71	0.00	Significant

The results in Table 4 reveal the summary of the T-Test analysis on peer coaching groups significantly impacts on teachers' practice in secondary schools Anambra state. The results indicated that the mean score was 2.71 with a corresponding standard deviation of 0.759. More so, the calculated independent t-test was 64.71 with a p-value of 0.00. Based on this, the null hypothesis was not retained and the alternative hypotheses was retained. Thus, Peer coaching groups significantly impacts on teachers' practice in secondary schools in Anambra State. This implies that Peer coaching groups highly impacts on teachers' practice in public secondary schools in Anambra State.

Test of Hypothesis Two

H₀: Subject-based professional clusters have no significant impact on teachers' practice in public secondary schools in Anambra State.

Table 5: Summary of the T-Test on Subject-based professional clusters significantly impact on teachers' practice in public secondary schools in Anambra State.

Variable	N	Mean	Std. Deviation	Std. Error Mean	t	P-Value	Decision
Subject-based professional clusters have no significant impact on teachers' practice in secondary schools in Anambra State.	311	2.70	.764	.042	64.00	.000	Significant

The results in Table 5 reveal the summary of the T-Test analysis on subject-based professional clusters significantly impact on teachers' practice in public secondary schools in Anambra State. The results indicated that the mean score was 2.70 with a corresponding standard deviation of 0.764. More so, the calculated independent t-test was 64.00 with a p-value of 0.00. Based on this, the null hypothesis was not retained and the alternative hypotheses was retained. Thus, subject-based professional clusters significantly impact on teachers' practice in secondary schools in Anambra State. This implies that subject-based professional clusters highly impact on teachers' practice in public secondary schools in Anambra State.

Test of Hypothesis Three

H₀: Collaborative lesson study teams have no significant impact on teachers' practice in public secondary schools in Anambra State

Table 6: Summary of the T-Test Collaborative lesson study teams significantly impact on teachers' practice in public secondary schools in Anambra State

Variable	N	Mean	Std. Deviation	Std. Error Mean	t	P-Value	Decision
Collaborative lesson study teams have no significant impact on teachers' practice in secondary schools in Anambra State.	311	2.68	0.785	0.043	61.92	.000	Significant

The results in Table 6 reveal the summary of the T-Test analysis on collaborative lesson study teams significantly impact on teachers' practice in public secondary schools in Anambra State. The results indicated that the mean score was 2.68 with a corresponding standard deviation of 0.785. More so, the calculated independent t-test was 61.92 with a p-value of 0.00. Based on this, the null hypothesis was not retained and the alternative hypotheses was retained. Thus, collaborative lesson study teams significantly impact on teachers' practice in secondary schools in Anambra State. This implies that collaborative lesson study teams highly impact on teachers' practice in public secondary schools in Anambra State.

Discussion of the Findings

The findings that peer coaching, subject-based clusters, lesson study teams, and school-based mentoring enhance teachers' professional practices is widely supported in educational literature. Peer coaching fosters a non-evaluative environment where teachers reflect on their instructional methods, receive feedback, and share best practices (Showers & Joyce, 2002). Such collaboration encourages pedagogical innovation and classroom management improvement. Subject-based clusters deepen content mastery and promote collective problem-solving, ensuring teachers stay current with evolving curricula (Ono & Ferreira, 2010). These clusters build professional learning communities that align teaching with national and global standards. More so, lesson study teams, originally from Japan, encourage joint lesson planning, implementation, and reflection, improving teachers' ability to recognize and respond to students' learning needs (Lewis, Perry & Murata, 2006). This model promotes evidence-based instructional decisions. These strategies collectively contribute to improved student learning outcomes. However, challenges remain. Peer coaching may be hindered by lack of time, trust, or administrative support (Zwart et al., 2009). Subject-based clusters can sometimes be superficial if not effectively facilitated. Despite these limitations, the collaborative nature of these models, when well-implemented, fosters sustainable professional growth and improved teaching quality (Darling-Hammond et al., 2017).

Conclusion

Peer coaching, subject-based clusters, and lesson study teams have all played important roles in enhancing teachers' professional practices in secondary schools. Through peer coaching, teachers have improved instructional delivery, received constructive feedback, and adopted new teaching strategies, while also managing classroom challenges more effectively. Subject-based clusters have strengthened content knowledge, encouraged collaboration, and supported alignment with curriculum trends. Lesson study teams have enhanced lesson planning, reflective practice, and identification of student learning needs.

Recommendations

1. Schools management should institutionalize peer coaching groups, subject-based clusters, and lesson study teams as part of ongoing professional development to enhance instructional delivery, reflective practice, and pedagogical innovation among teachers.

2. School management should foster environments that support teacher motivation, confidence, and professional growth by assigning experienced mentors and facilitating collaborative planning sessions.
3. They should as well check regularly how assessment of professional development initiatives influence student achievement, ensuring that improved teacher practices translate to measurable gains in student performance.

REFERENCES

- Anyaeji, A. V., Okonkwo, C. E., & Afugbuom, O. (2023). Classroom management practices adopted by teachers for enhancing quality teaching and learning in secondary education in Anambra State, Nigeria. *Unizik Journal of Educational Management and Policy*, 5(2). Retrieved from Nnamdi Azikiwe University Journal Database.
- Clark, K. M., Pauley, A., & Rich, P. J. (2023). Teacher knowledge sharing in professional learning communities: A systematic review. *SAGE Open*, 13(4), 1–15. <https://doi.org/10.1177/21582440231200983>
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Denton, P., & Hasbrouck, J. (2020). Promoting student–teacher interactions: Exploring a peer coaching model for teachers in a preschool setting. *Early Childhood Research Quarterly*, 52(C), 88–98.
- Doğan, S., & Adams, A. (2018). Professional learning communities as a professional development model: A meta-synthesis of the qualitative research. *Educational Sciences: Theory & Practice*, 18(4), 983–1006. <https://doi.org/10.12738/estp.2018.4.001>
- Eleke, D. C. (2025). Anambra Government selects 22 schools for pilot scheme of ‘smart learn initiative.’ Retrieved from: <https://www.thisdaylive.com/2025/05/15/anambra-govt-selects-22-schools-for-pilot-scheme-of-smart-learn-initiative/>
- Hudson, P. (2013). Mentoring as professional development: 'Growth for both' mentor and mentee. *Professional Development in Education*, 39(5), 771-783.
- Ikegbusi, N. G., & Egwu, J. U. (2024). Impact of professional learning communities on public secondary school teachers’ job satisfaction in Lagos State. *International Journal of*

- Education Research and Scientific Development*, 5(5), 17–? Retrieved from ijresd.org/article/view/141
- Jarvis, R., Dempsey, K., Gutierrez, G., Lewis, D., Rouleau, K., & Stone, B. (2017). *Peer coaching that works: The power of reflection and feedback in teacher triad teams (White Paper)*. McREL International.
- Lewis, C., Perry, R., & Murata, A. (2006). How should research contribute to instructional improvement? *Educational Researcher*, 35(3), 3–14.
- Melekhina, E. A., & Barabasheva, I. V. (2019). Peer coaching as a means of EFL teachers' professional development. In Z. Anikina (Ed.), *Going Global through Social Sciences and Humanities: A Systems and ICT Perspective* (pp. 303–309). Springer. https://doi.org/10.1007/978-3-030-11473-2_32
- Nwogu, R. O., Diete-Spiff, M. I., & Ebereonwu, C. O. (2024). Impact of school learning environment on students' dropout in public secondary schools in Rivers State Nigeria. *International Journal of Innovative Psychology & Social Development*, 12(4), 31–39.
- Ono, Y., & Ferreira, J. (2010). A case study of continuing teacher professional development through lesson study in South Africa. *South African Journal of Education*, 30(1), 59–74.
- Popoola, A. A., & Falebita, O. S. (2016, republished through 2019). Effects of teachers' lesson study on Ekiti State secondary school students' academic achievement in mathematics. *Research Journal of Education*, 4(6), 1–10.
- Prenger, R., Poortman, C. L., & Handelzalts, A. (2019). The effects of networked professional learning communities. *Journal of Teacher Education*, 70(5), 441–452. <https://doi.org/10.1177/0022487117753574>
- Richit, I. (2023). Using lesson study as a tool to cope with instructional challenges: A case study of chemistry teachers in Nigeria. *African Journal of Teacher Education*, 10(2), 45–60.
- Showers, B., & Joyce, B. (2002). Student achievement through staff development. *ASCD*.
- Tait-McCutcheon, S., & Drake, M. (2015). If the jacket fits: A metaphor for teacher professional learning and development. *Teaching and Teacher Education*, 55, 1–12. <https://doi.org/10.1016/j.tate.2015.12.005>

Tolu-Kolawole, D. (2023). *Nigerian educators face challenges in professional development – TRCN*. Available at: https://punchng.com/nigerian-educators-face-challenges-in-professional-development-trcn/?utm_source=chatgpt.com

Zwart, R. C., Wubbels, T., Bolhuis, S., & Bergen, T. C. (2009). Teacher learning through reciprocal peer coaching. *Teaching and Teacher Education*, 25(8), 987–1002.

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