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Professional Development Amidst Periphery: Challenges and Opportunities for Teachers in Tawi-Tawi

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Abstract

This study explored the challenges and perceived opportunities associated with professional development among teachers and school heads in geographically isolated communities in Tawi-Tawi, Philippines. Using a qualitative research design, six purposively selected participants, comprising three teachers and three school heads from selected schools in Bongao, Tawi-Tawi, participated in semi-structured interviews. Responses were recorded, transcribed, and examined through thematic analysis. Findings identified five major barriers to professional development: limited and irregular training opportunities, geographic isolation and costly transportation, poor internet connectivity, inadequate institutional support, and insufficient financial and educational resources. Despite these constraints, participants perceived professional development as beneficial for improving teaching strategies, strengthening leadership skills, increasing content knowledge, enhancing classroom management, and supporting career advancement. The findings indicate a persistent gap between educators' recognition of professional learning benefits and their ability to access training consistently. Educational institutions and relevant authorities should prioritize regular, locally accessible programs, appropriate financial and logistical assistance, stronger school support, and flexible delivery arrangements suited to remote island communities. Because the study involved only six purposively selected participants and relied on interview accounts, its findings reflect particular experiences rather than outcomes generalizable to all educators in Tawi-Tawi. Nevertheless, the study offers context-specific evidence for planning professional development initiatives responsive to geographic and institutional constraints. Aligned with Sustainable Development Goal 4, Quality Education, it highlights how sustained and equitable access to professional learning may strengthen educators' professional capacity and contribute to more inclusive, sustainable educational development in underserved island communities, particularly through sustained institutional commitment and support.

Keywords: Educational Opportunities, Geographic Isolation, Institutional Support, Professional Development, School Heads, Tawi-Tawi, Teacher Challenges

1. Introduction

Professional development is a fundamental component of teacher effectiveness and educational improvement. Continuous learning enables teachers to strengthen instructional competencies, respond to changing curriculum requirements, and improve classroom performance. For school heads, professional development supports

instructional leadership, supervision, and institutional management. However, educators in geographically isolated and disadvantaged areas often experience unequal access to training, professional resources, and capacity-building opportunities. In Tawi-Tawi, geographic isolation, transportation difficulties, inadequate connectivity, and limited institutional resources restrict teachers' and school heads' participation in professional development. These conditions create disparities between educators in peripheral communities and those in more accessible locations. Nevertheless, teachers demonstrate resilience and commitment to professional growth despite these constraints. Understanding their experiences is essential for identifying responsive strategies that strengthen educational access, professional competence, and school effectiveness.

Professional development contributes to improved pedagogical competence, instructional innovation, and professional growth. Effective professional development requires careful consideration of program design, learning activities, and evidence supporting instructional improvement (Asterhan & Lefstein, 2024). Collaborative and collegial learning environments are increasingly emphasized in professional development strategies that support teachers' instructional competencies (El Islami et al., 2022). Sims et al. (2025) emphasize that effective professional development involves structured learning that strengthens teachers' understanding, motivation, instructional techniques, and classroom practices, particularly when learning produces sustained behavioral improvements. Similarly, Thurlings and den Brok (2017) found that professional development improves teacher knowledge, instructional skills, and student learning outcomes, especially through collaborative and practice-based activities. Zhou et al. (2023) further demonstrated that professional development strengthens teachers' self-efficacy, pedagogical knowledge, and instructional confidence, although its influence on student achievement depends on implementation quality. Despite these benefits, teachers encounter significant barriers to professional learning. Limited training availability, insufficient resources, and unequal access to development opportunities continue to affect educators in underserved communities (Sausa, 2026). Workload and time constraints also restrict participation, as teachers must balance instructional responsibilities, administrative tasks, and professional advancement activities (Aquino et al., 2022). Similar difficulties involving time management and competing professional responsibilities were identified among public secondary school teachers (Adornado, 2026). Financial limitations further discourage participation because professional development often requires expenditures for transportation, registration, connectivity, and graduate education. These challenges are intensified by inadequate technological resources and unstable internet connections, particularly in rural communities (Pasique & Maguate, 2023). Teachers in remote areas also experience limited instructional materials, transportation difficulties, technological inadequacies, and professional isolation that affect their performance and well-being (Ancheta & Gallego, 2025). Nevertheless, professional development offers opportunities to improve instructional strategies, strengthen subject mastery, develop leadership competencies, enhance classroom management, and support career progression. Collaborative learning and locally accessible professional development programs can help educators overcome some barriers while strengthening professional relationships and teaching effectiveness.

Globally, professional development is recognized as an important mechanism for improving educational quality and strengthening teachers' instructional effectiveness. Research indicates that sustained, collaborative, and practice-oriented professional learning contributes to teacher competence and improved educational practices (Thurlings & den Brok, 2017). Its effectiveness also depends on the quality of implementation and the extent to which teachers apply acquired competencies in classroom settings (Zhou et al., 2023). In the Philippines, teachers in geographically isolated and disadvantaged areas face persistent difficulties accessing professional development. Research has identified technological competencies, pedagogical strategies, and research skills as important professional learning needs, while inadequate connectivity, limited resources, and insufficient institutional support constrain participation (Chin et al., 2022). Similarly, elementary teachers in Palawan encountered financial limitations, heavy workloads, and restricted access to seminars and training despite recognizing the importance of professional development (Ronquillo, 2026). Technology-enabled professional development can support active learning and teacher collaboration, although adequate feedback, expert assistance, and equitable access remain important considerations (Huang et al., 2024). The Department of Education (2021) implemented initiatives to distribute digital learning devices to remote schools, highlighting institutional efforts to address technological access barriers in geographically disadvantaged communities. Learning Action Cell sessions provide a locally accessible and cost-effective approach to professional learning. These collaborative activities support pedagogical improvement and knowledge sharing among teachers in remote Philippine communities (Vega & Orleans, 2025). Research synthesizing online and blended teacher professional development indicates that these approaches can strengthen professional competencies and instructional practices when appropriately designed and supported (Stavermann, 2025). Within Tawi-Tawi, the geographic separation of island communities creates additional logistical and financial difficulties. A qualitative study involving teachers in geographically isolated schools in South Upi, Maguindanao, identified difficult travel conditions, limited resources, and reliance on community support and coping strategies, highlighting the challenges experienced by educators in remote Philippine communities (Mopuyang, 2024). Limited transportation, irregular training schedules, and inadequate digital infrastructure restrict participation in professional development activities. A systematic review of rural schools identified technological, institutional, and teacher-related challenges that complicate digital integration, emphasizing the importance of context-sensitive support and professional training (Mustafa et al., 2024). A systematic review of online teacher professional learning highlighted persistent inequalities in participation and

emphasized the need to address technological, institutional, and policy-related factors affecting professional learning opportunities (Wang & Hu, 2025). These conditions emphasize the importance of localized training, institutional assistance, and professional learning opportunities responsive to the circumstances of teachers and school heads in peripheral communities.

This study is anchored in Situated Learning Theory by Lave and Wenger (1991), which explains learning as a social process embedded in authentic contexts and communities of practice. The theory emphasizes that professional knowledge and competencies develop through participation, collaboration, and engagement within meaningful learning environments. Applied to teacher professional development in Tawi-Tawi, this perspective highlights the importance of learning opportunities that reflect educators' actual teaching conditions, institutional responsibilities, and geographic circumstances. Collaborative professional learning, including Learning Action Cell sessions, provides opportunities for teachers to exchange instructional experiences, develop practical competencies, and strengthen professional relationships (Vega & Orleans, 2025). The theoretical perspective supports examining professional development not merely as participation in formal training but as a contextualized process influenced by institutional support, accessibility, collaboration, and educators' professional experiences. It provides a foundation for understanding how teachers and school heads pursue professional growth despite geographic and resource-related constraints.

Existing studies have established the importance of professional development in improving instructional competence, teacher confidence, and educational practices (Sims et al., 2025; Zhou et al., 2023). Research has also identified workload, financial limitations, inadequate connectivity, and insufficient resources as barriers to participation (Aquino et al., 2022; Pasique & Maguate, 2023). A meta-analysis of 128 high-quality studies found that teacher professional development generally improves student achievement, although its effectiveness varies considerably across interventions (Visscher et al., 2025). Although these studies provide valuable insights, the specific experiences of teachers and school heads in the geographically isolated island communities of Tawi-Tawi require closer examination. The interaction of geographic isolation, institutional support, training availability, and resource limitations creates a distinctive context for professional development. Accordingly, this study investigates the challenges encountered by teachers and school heads in accessing professional development and the benefits and opportunities they perceive from participation. Specifically, it seeks to identify barriers to professional learning and examine its contributions to instructional strategies, leadership competencies, content knowledge, classroom management, and career advancement. By exploring these experiences, the study aims to provide context-specific insights that may inform accessible professional development programs, institutional capacity-building initiatives, and educational policies responsive to peripheral communities.

The study primarily aligns with Sustainable Development Goal 4 (Quality Education) by emphasizing equitable access to professional learning and continuous improvement in teacher competence. Addressing geographic, technological, and institutional barriers to professional development can support more inclusive educational opportunities and strengthen instructional quality in underserved communities. The study also relates to SDG 8 (Decent Work and Economic Growth) through its focus on professional competence, career advancement, and continuing development among teachers and school heads. Accessible training opportunities can strengthen educators' professional capabilities and support their progression within the education sector. Furthermore, the research contributes to SDG 10 (Reduced Inequalities) by examining disparities in professional development accessibility between geographically isolated communities and more accessible educational settings. Identifying these barriers can inform measures that promote more equitable distribution of training opportunities, institutional resources, and professional support. Together, these goals emphasize the importance of inclusive, accessible, and sustainable professional development systems that address the needs of educators in peripheral communities.

The study contributes to multidisciplinary sustainability by examining how equitable professional development can strengthen educational quality, institutional capacity, and professional opportunities in geographically isolated communities. From an educational sustainability perspective, continuous professional learning supports the long-term improvement of instructional practices, subject knowledge, classroom management, and teacher effectiveness. Strengthening access to relevant training can help educators respond to evolving educational demands while maintaining instructional quality. Regarding institutional sustainability, professional development strengthens school leadership, instructional supervision, and organizational capacity. Improved institutional support, collaborative learning, and locally responsive training initiatives can help schools maintain professional growth opportunities despite geographic and resource-related limitations. The study also has implications for technological sustainability, particularly through its examination of inadequate internet connectivity and limited technological resources. Addressing these barriers can improve educators' access to online training, digital learning materials, and technology-supported professional development. In terms of socioeconomic and community sustainability, accessible professional development can support career advancement, strengthen educators' professional capabilities, and reduce disparities in opportunities between peripheral and more accessible communities. Overall, the study emphasizes that sustainable teacher professional development requires coordinated institutional support, equitable resource allocation, and context-sensitive training opportunities. Its findings may guide educational stakeholders in developing inclusive professional learning initiatives that strengthen teacher competence, school leadership, and educational sustainability in Tawi-Tawi.

2. Material and methods

2.1 Research Design
The study utilized a qualitative research design to explore the lived experiences, perceptions, and insights of teachers and school heads regarding professional development in geographically isolated communities. This approach enabled an in-depth examination of the challenges affecting access to professional learning opportunities and the benefits associated with participation in professional development programs. The design was appropriate for understanding educators' experiences within the geographically and contextually marginalized setting of Tawi-Tawi.

2.2 Locale of the Study
The study was conducted in selected schools in Bongao, Tawi-Tawi, Philippines. The research locale represents a peripheral educational setting where geographic isolation and limited access to professional development opportunities influence teachers' and school heads' professional growth. The setting provided the context for examining the challenges and opportunities associated with continuing professional development in geographically disadvantaged communities.

2.3 Respondents of the Study
The respondents consisted of six (6) participants, comprising three (3) school heads and three (3) teachers from selected schools in Bongao, Tawi-Tawi. These participants were directly involved in teaching, school leadership, and professional development activities. Their experiences and perspectives provided qualitative insights into the barriers affecting professional learning and the perceived benefits of professional development participation.

2.4 Sample and Sampling Procedure
The study employed purposive sampling to select six (6) participants based on their direct involvement and experience in teacher professional development programs and school leadership practices. This sampling approach enabled the researcher to obtain relevant information from teachers and school heads who could provide firsthand accounts of professional development challenges and opportunities within the study locale.

2.5 Research Instrument
A semi-structured interview guide served as the primary research instrument. It contained open-ended questions designed to explore the challenges encountered by teachers and school heads in accessing professional development and the benefits they perceived from participation. The questions addressed training availability, geographic and institutional barriers, instructional and leadership improvements, acquired knowledge and skills, and professional advancement. The instrument allowed participants to provide detailed responses while enabling the researcher to ask follow-up questions for clarification and deeper understanding.

2.6 Data Gathering Procedure
Before conducting the study, the researcher secured permission from the concerned school authorities and informed participants about the research objectives. Semi-structured interviews were subsequently conducted at times and locations convenient for the participants. The interviews provided opportunities for teachers and school heads to describe their experiences, challenges, and perceived benefits related to professional development. Responses were recorded and transcribed to prepare the qualitative data for systematic analysis.

2.7 Data Analysis Techniques
The study employed thematic analysis to examine the interview responses. Transcribed data were reviewed, and recurring ideas were coded and organized into themes reflecting the participants' experiences of professional development. The analysis focused on challenges involving training availability, geographic isolation, internet connectivity, institutional support, and resource limitations, as well as perceived opportunities related to instructional improvement, leadership development, content knowledge, classroom management, and career advancement. These themes provided the basis for interpreting the challenges and opportunities associated with professional development among teachers and school heads in Tawi-Tawi.

2.8 Ethical Considerations
Before data collection, permission was obtained from the concerned school authorities, and participants were informed about the purpose of the study. Interviews were scheduled at convenient times and locations to accommodate participants' availability. These procedures reflected the ethical considerations documented in the original methodology.

3. Results and Discussion

3.1 Challenges Encountered by Teachers and School Heads in Accessing Professional Development

3.1.1 Limited Availability of Professional Development Programs
The findings revealed that teachers and school heads experienced limited and irregular access to professional development programs. Participants reported that training opportunities were infrequently conducted, sometimes

occurring only once or twice annually, and were often dependent on external initiatives or higher educational offices. Available programs frequently accommodated only selected participants, restricting equal access to seminars, workshops, and capacity-building activities. These findings indicate that inconsistent training availability limits continuous professional learning among educators in peripheral communities. The absence of sustained, locally organized programs restricts opportunities to improve professional competencies and instructional practices. More structured and regularly implemented professional development initiatives are therefore necessary to support continuous teacher and school leadership development in Tawi-Tawi.

3.1.2 Geographic Isolation and Transportation Difficulties

Participants identified geographic isolation as a major obstacle to professional development participation. Teachers and school heads reported that traveling from distant island communities to training venues required considerable time, transportation expenses, and logistical arrangements. Travel by boat or other long-distance transportation made participation particularly difficult when training programs were conducted outside their locality. These findings demonstrate how geographic conditions create unequal access to professional learning opportunities. Transportation difficulties and associated expenses discourage regular participation, limiting educators' ability to acquire updated competencies. Locally accessible and context-responsive training programs may help reduce these barriers and support professional development among teachers in geographically isolated communities.

3.1.3 Poor Internet Connectivity and Limited Digital Access

The findings showed that unstable internet connectivity significantly affected teachers' and school heads' participation in online and blended professional development programs. Participants reported difficulties joining virtual training sessions, downloading instructional materials, and engaging in online discussions because of weak or unreliable internet signals. These limitations resulted in missed opportunities for professional learning. Poor connectivity restricts the accessibility and effectiveness of technology-supported professional development. Although virtual training can provide alternatives to travel-dependent programs, unreliable internet infrastructure limits its usefulness in remote communities. Improving digital accessibility and providing flexible training modalities are therefore important considerations for strengthening professional learning opportunities in Tawi-Tawi.

3.1.4 Inadequate Institutional and School Support

Participants reported insufficient institutional support for professional development, particularly regarding financial assistance, transportation allowances, and official time for attending training activities. Some teachers and school heads also identified limited encouragement and facilitation from school leadership as factors affecting participation in professional learning opportunities. These findings suggest that institutional support influences educators' ability to pursue continuous professional growth. Without adequate administrative assistance, financial support, and opportunities to attend training, professional development may become difficult to sustain. Strengthening school-level support mechanisms can help improve participation and promote more equitable professional learning opportunities.

3.1.5 Financial and Educational Resource Constraints

The findings revealed that inadequate funding, limited learning materials, and insufficient logistical resources restricted access to professional development. Participants emphasized that the financial requirements associated with attending seminars and workshops outside their locality created additional difficulties. These constraints were particularly challenging for educators assigned to geographically isolated island communities. Resource limitations intensify the challenges associated with geographic isolation and inadequate institutional support. Insufficient funding reduces opportunities for participation, while limited educational materials affect access to professional learning resources. Increased resource allocation and context-sensitive institutional assistance are therefore important for improving professional development accessibility in peripheral educational settings.

3.2 Perceived Benefits and Opportunities of Professional Development Participation

3.2.1 Improvement in Teaching Strategies and Instructional Practices

Teachers reported that participation in professional development improved their instructional strategies and teaching approaches. Training programs helped them adopt learner-centered methods, including differentiated instruction, collaborative learning activities, and technology-supported instruction. Participants also indicated that these experiences strengthened their confidence and effectiveness in classroom teaching. These findings suggest that professional development contributes to instructional improvement by equipping teachers with strategies responsive to diverse learner needs. Exposure to updated teaching approaches enables educators to refine classroom practices and promote more engaging learning experiences. Continuous professional learning therefore remains important for strengthening instructional competence and teaching quality.

3.2.2 Enhancement of Educational Leadership and Management Skills

School heads reported improvements in leadership competencies following participation in professional development activities. They identified enhanced supervision, decision-making, mentoring, and school management practices as important benefits. Participants also indicated that leadership training strengthened their confidence in performing administrative responsibilities and supporting teachers. These findings highlight the contribution of professional development to educational leadership effectiveness. Strengthened leadership competencies enable school heads to provide instructional guidance, support teachers' professional needs, and establish more responsive school environments. Sustained leadership development can therefore contribute to improved school management and institutional effectiveness.

3.2.3 Increased Content Knowledge and Subject-Matter Competence

Participants reported that professional development strengthened their subject-matter knowledge and understanding of updated curriculum standards. Teachers indicated that training programs provided additional instructional techniques and improved their ability to explain lessons clearly and accurately. School heads also recognized the value of professional learning in strengthening their understanding of instructional leadership. These findings indicate that continuous professional development supports the acquisition and application of updated professional knowledge. Improved subject mastery enables teachers to deliver more accurate and relevant instruction, while strengthened instructional knowledge helps school heads provide appropriate academic support. Professional learning consequently contributes to maintaining teaching competence amid changing educational requirements.

3.2.4 Strengthening of Classroom Management Skills

Teachers identified improved classroom management as a significant benefit of professional development participation. They reported acquiring strategies for establishing classroom rules, addressing diverse learner behaviors, and maintaining student engagement. School heads similarly indicated that professional development improved their ability to guide and support teachers in managing classroom environments. These findings demonstrate that professional development contributes to more organized and productive learning environments. Effective classroom management strategies support instructional delivery and help teachers respond to varying student needs. Strengthening these competencies through continuous training can improve classroom practices and support educational effectiveness.

3.2.5 Career Advancement and Professional Growth Opportunities

Teachers and school heads reported that professional development supported their career advancement and overall professional growth. Participants indicated that seminars, training programs, and certification activities strengthened their professional qualifications, increased their confidence in seeking promotions, and prepared them for additional responsibilities. School heads also reported that leadership development improved their readiness for more complex administrative positions. Participants further recognized networking, professional exposure, and recognition as valuable outcomes. These findings suggest that professional development extends beyond instructional and leadership improvement by supporting long-term career progression. Acquiring additional competencies and professional qualifications can strengthen educators' readiness for higher responsibilities within the education system. Continued access to professional development therefore contributes to individual professional growth and institutional capacity-building.

3.3 Interrelationship Between Professional Development Challenges and Opportunities

The findings revealed that teachers and school heads recognized the benefits of professional development despite experiencing substantial barriers to participation. Limited training availability, geographic isolation, unreliable internet connectivity, inadequate institutional support, and insufficient resources restricted access to learning opportunities. Nevertheless, participants consistently identified improvements in teaching strategies, leadership competencies, subject knowledge, classroom management, and career advancement as outcomes of professional development participation. These findings indicate that professional development accessibility and professional growth are closely connected in the experiences of educators in Tawi-Tawi. Although training programs provide opportunities for improving professional competence, geographic and institutional constraints limit consistent participation. Addressing these barriers through accessible, sustained, and context-responsive professional development initiatives may strengthen teachers' and school heads' ability to benefit from continuous professional learning.

3.4 Implications for Professional Development in Geographically Isolated Educational Communities

The overall findings identified persistent logistical, technological, institutional, and financial challenges affecting professional development participation among teachers and school heads in Tawi-Tawi. At the same time, participants acknowledged the value of professional learning in improving instructional practices, strengthening leadership competencies, and supporting career progression. These findings emphasize the importance of professional development programs that respond to the circumstances of educators in geographically isolated communities. The results suggest that improving professional development accessibility requires stronger institutional assistance, adequate resource allocation, improved technological support, and more locally available

training opportunities. Such measures may reduce participation barriers while supporting continuous professional growth. The study therefore provides context-specific insights that may inform educational capacity-building initiatives and professional development policies responsive to the needs of teachers and school heads in peripheral educational settings.

4. Conclusion & Recommendations

The study concludes that teachers and school heads in Bongao, Tawi-Tawi experience substantial challenges in accessing professional development opportunities because of geographic isolation, limited training availability, poor internet connectivity, inadequate institutional support, and insufficient educational resources. Despite these constraints, participants recognized the importance of professional development in strengthening instructional strategies, leadership competencies, subject-matter knowledge, classroom management, and career advancement. The findings demonstrate that professional growth remains a priority among educators in geographically isolated communities, although logistical and institutional barriers restrict their consistent participation in professional learning activities. The experiences of teachers and school heads further highlight the importance of accessible, sustained, and context-responsive professional development initiatives. Overall, the study provides qualitative evidence that improving access to professional learning opportunities is essential for supporting educators' professional growth and strengthening institutional capacity in peripheral educational settings. These insights offer a foundation for developing more inclusive professional development programs responsive to the circumstances of teachers and school heads in Tawi-Tawi.

Based on the findings, educational institutions, school administrators, and relevant education authorities should strengthen the accessibility, availability, and sustainability of professional development programs for teachers and school heads in Tawi-Tawi. Priority should be given to organizing regular, locally accessible training activities that minimize transportation difficulties and associated expenses. School administrators should provide stronger institutional support through appropriate scheduling, financial assistance, transportation allowances, and adequate learning resources to encourage wider participation. Education authorities should also address technological barriers by improving internet connectivity and providing flexible training arrangements suitable for geographically isolated communities. Professional development initiatives should emphasize instructional strategies, educational leadership, subject-matter competence, classroom management, and career advancement, reflecting the benefits identified by participants. Furthermore, schools should strengthen collaborative professional learning opportunities and coordinate with relevant educational stakeholders to sustain capacity-building activities. These measures may promote more equitable participation and support continuous professional growth among educators in peripheral communities. The study was limited to six purposively selected participants, comprising three teachers and three school heads from selected schools in Bongao, Tawi-Tawi. Its qualitative design relied on participants' experiences and perceptions gathered through semi-structured interviews and analyzed thematically. Consequently, the findings reflect context-specific perspectives and cannot be statistically generalized to all teachers and school heads in Tawi-Tawi or other geographically isolated communities. The study examined perceived challenges and benefits rather than independently measuring changes in teaching performance or student outcomes. Future research may involve broader participant groups, additional school settings, and complementary research methods to further examine professional development accessibility and outcomes.

5. Compliance with ethical standards

The study observed ethical considerations throughout the research process. Prior to data collection, permission was secured from the concerned school authorities, and participants were informed about the study's purpose. Semi-structured interviews were conducted at convenient times and locations, and participants' responses were recorded, transcribed, and analyzed for research purposes. The interview guides allowed participants to withhold their names. However, the manuscript does not explicitly document written informed consent, formal ethics committee approval, specific data protection procedures, funding disclosures, or conflicts of interest. These details should be verified and appropriately disclosed by the researcher before publication.

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