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Mapping the Professional Development Strategy of Teachers at Bit-os Elementary School

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Abstract

This study mapped the professional development strategy implemented through Learning Action Cell (LAC) sessions at Bit-os Elementary School over three school years and examined their implementation, contributions to teacher professional growth, strengths, challenges, and implications for an enhancement plan. A mixed-method descriptive research design was employed using documentary analysis, document mapping, content analysis, and thematic analysis, with school documentary records and LAC evaluation forms serving as primary data sources. Findings revealed an expansion of LAC activities, with literacy and reading strategies and numeracy and mathematics assessment emerging as the most frequently addressed topics. Collaborative learning, peer coaching and mentoring, reflective practice, inquiry-based learning, and ICT integration characterized the sessions. LAC implementation and teacher professional development were highly evident, particularly in participant involvement, ICT integration, pedagogical development, and leadership development, while the sessions were evaluated as highly effective. Key strengths included teacher collaboration, active participation, facilitation, ICT use, systematic implementation, and relevance to professional learning needs. However, time constraints, workload, limited resources, documentation demands, and emerging educational concerns remained implementation challenges. The study concludes that LAC functions as a responsive school-based professional development mechanism and proposes a Professional Development Enhancement Plan emphasizing sustained mentoring, collaboration, reflective practice, instructional research, resource support, and monitoring.

Keywords: Learning Action Cell, Professional Development, Collaborative Learning, Instructional Improvement, Teacher Professional Growth

Introduction

Continued professional development (CPD) for teachers is widely recognized as a key driver of instructional quality and improved learning outcomes. Recent research indicates that CPD is most effective when it is sustained, collaborative, responsive to teachers' needs, and closely connected to classroom practice. These features allow teachers to reflect critically on their instruction, exchange professional knowledge, and

respond more effectively to learners' diverse needs (Ventista & Brown, 2023). Approaches such as professional learning communities (PLCs), lesson study, and peer coaching similarly emphasize reflective dialogue, shared inquiry, and collective responsibility for improving teaching and learning (de Jong et al., 2022).

In the Philippine basic education system, Learning Action Cell (LAC) sessions were institutionalized by the Department of Education (DepEd) as a school-based approach to teachers' continuing professional development. LACs provide a formal platform through which teachers collaboratively examine instructional concerns, analyze learner-performance data, and develop appropriate interventions aligned with curriculum standards and school-improvement goals (De Guzman et al., 2023). This approach reflects DepEd's continuing efforts to strengthen teacher quality, instructional leadership, and professional growth within the K to 12 Basic Education Program and the Philippine Professional Standards for Teachers (Department of Education [DepEd], 2021).

LAC sessions are also grounded in the principle that teacher learning is strengthened when professional development is contextualized, job-embedded, and responsive to classroom realities. Through reflection, collaborative inquiry, and collective problem-solving, LACs can help teachers improve lesson delivery, learner engagement, classroom management, and assessment practices. Recent Philippine research has associated effective LAC practices with stronger teacher self-efficacy in instructional practice, classroom management, student engagement, and professional commitment (Dela Cruz & Baguio, 2024). When implemented effectively, LAC sessions can foster a collegial and professionally accountable school culture that supports continuous instructional improvement.

Division Memorandum No. 289, s. 2025, states that School Learning Action Cells (SLACs) are intended to strengthen teacher competencies and improve learner achievement by cultivating professional learning communities among teachers. To ensure that schools consistently provide professional development opportunities, school administrators were instructed to submit monthly SLAC accomplishment reports together with the corresponding means of verification (Department of Education–Schools Division Office of Butuan City, 2025).

At the school level, teachers continue to encounter challenges related to curriculum implementation, learner diversity, limited instructional resources, and changing pedagogical demands. These concerns highlight the importance of effectively implementing LAC sessions as a means of strengthening instruction through professional collaboration. However, variations in the planning, facilitation, monitoring, and sustainability of LAC sessions may influence their effects on teachers' classroom practices. It is therefore important to examine how LAC sessions are implemented and how they contribute to the improvement of instructional practices.

This study was conducted at Bit-os Elementary School, a public elementary school under the Department of Education–Schools Division Office of Butuan City. The school serves learners from varied socioeconomic backgrounds and endeavors to provide quality, learner-centered education consistent with national educational standards and policies.

In addition to examining LAC reports, the study analyzed the results of LAC session evaluations conducted during the past three years. These data provide valuable evidence for assessing the contribution of LAC sessions to instructional processes because they capture teachers' perceptions of the relevance, effectiveness, and usefulness of the sessions.

Bit-os Elementary School conducts Learning Action Cell sessions as an integral part of its professional development program. The sessions are held regularly and involve teachers from different grade levels and learning areas. Discussions typically focus on instructional concerns, including lesson planning, teaching strategies, learner assessment, classroom management, and the alignment of instruction with curriculum standards.

Although LAC sessions are regularly conducted, their implementation must still be evaluated to determine how effectively they improve teachers' instructional practices. Identifying the strengths, limitations, and challenges associated with LAC implementation at Bit-os Elementary School can provide a sound basis for evidence-based decisions in instructional leadership. Accordingly, this research is situated within the school's continuous improvement framework and is expected to contribute to the enhancement of teacher professional development and instructional quality.

This research was designed to investigate the implementation of Learning Action Cell sessions as a professional development approach and assess their contribution to teachers' instructional practices at Bit-os Elementary School. Specifically, it examined the implementation processes, activities, and accomplishments of LAC sessions conducted during the past three years to determine how these sessions support the improvement of teachers' classroom practices. In addition, the research sought to describe the implementation of LAC sessions in terms of the topics discussed, teacher participation, pedagogical approaches employed, and the resulting improvements in instructional content and practice.

Review Studies

This section presents relevant literature and studies that provide the theoretical and empirical basis for conducting the study.

Professional learning is most effective when it is sustained, collaborative, context-responsive, and closely connected to teachers' everyday work. School-based learning structures, including peer-learning groups and professional learning communities, give teachers opportunities to exchange knowledge, reflect on their classroom experiences, and collaboratively address learners' needs. These findings support the adoption of Learning Action Cells (LACs) as professional learning structures that promote collective inquiry and reflective practice among teachers (Sancar et al., 2021).

Professional development is particularly important when teachers must respond to curriculum reforms, technological developments, learning disruptions, and other changes in education. Collaborative and inquiry-based professional learning enables teachers to develop, test, and refine instructional strategies within their school contexts. This perspective underscores the importance of LACs as school-based structures that help teachers respond to emerging educational demands while continuously improving their instructional practices (Organisation for Economic Co-operation and Development [OECD], 2023).

The research design adopted in this study recognizes the importance of documenting LAC implementation through session plans, attendance records, activity reports, monitoring tools, and accomplishment reports. Such documentation promotes accountability and provides evidence for assessing whether planned activities have been implemented effectively (Floreno, 2021). Contemporary professional-development evaluation frameworks further recommend examining participant selection and engagement, implementation processes, follow-up support, and program outcomes. Together, these principles establish a sound basis for using documentary evidence to evaluate the implementation and effectiveness of school-based professional development programs (Hiew & Murray, 2024).

Collaborative professional development approaches, such as lesson study and peer mentoring, can strengthen teacher effectiveness by encouraging shared learning, professional dialogue, and the collective examination of classroom practices (Elkomy & Elkhaial, 2022). Technology integration is likewise important because teachers require appropriate technological knowledge, confidence, and pedagogical skills to respond to contemporary instructional demands. Professional development should therefore help teachers connect technology with suitable teaching approaches and meaningful learning activities rather than merely train them to operate digital tools (Akram et al., 2022).

Effective professional development requires sustained engagement, opportunities for practice, and

mechanisms that motivate teachers to apply new knowledge in their classrooms. Coaching, feedback, collaborative planning, and structured opportunities to rehearse instructional strategies can help teachers translate professional learning into improved classroom practice (Sims & Fletcher-Wood, 2021). In the Philippine context, LAC sessions provide teachers with opportunities to discuss instructional concerns, share effective practices, reflect on teaching experiences, and collectively develop strategies for attaining curriculum goals (Culajara, 2023).

Professional development should strengthen teachers' content knowledge, pedagogical competence, and ability to integrate these areas into classroom instruction. Reviews of professional development programs indicate that effective initiatives provide relevant content, opportunities for active participation, practical application, collaboration, and support for transferring new knowledge into teaching practice (Johari et al., 2022). Continuous professional learning should also encourage teachers to examine their experiences, interact with professional knowledge, and reconstruct their practices through reflection and collaborative inquiry (Richit, 2021).

Professional development must remain responsive to teachers' instructional needs and intended learner outcomes. Programs are more likely to influence teaching when they help teachers develop useful insights, establish clear instructional goals, learn appropriate techniques, and repeatedly apply and refine those techniques in practice (Sims et al., 2025). Within the Philippine setting, LAC implementation can help address identified gaps in teachers' competencies by providing structured opportunities to discuss priority curriculum and instructional concerns. These approaches demonstrate the importance of aligning professional development activities with teachers' documented learning needs and the specific challenges they encounter in their classrooms (Caballes, 2023).

Professional development is more successful when it strengthens the instructional and organizational competencies teachers need to become more effective practitioners. It should provide relevant and practical learning experiences that respond to teachers' identified needs, classroom concerns, and school priorities. In the Philippine context, LAC sessions may address curriculum implementation, learner diversity, instructional improvement, and other challenges encountered by teachers in their schools. A Philippine case study found that LACs can help address gaps in teachers' subject preparation by providing opportunities for collaboration, peer assistance, and context-specific professional learning (Bajar et al., 2021).

Coaching, mentoring, workshops, and collaborative learning can facilitate the transfer of professional knowledge to classroom practice. Experiential activities become more meaningful when teachers are given opportunities to apply new strategies, reflect on their results, receive feedback, and revise their practices. A systematic review by D'Angelo et al. (2022) further emphasized that professional development should preserve the interpersonal dimension of teacher learning, even when technology is used to deliver or support training. LAC sessions can provide this combination of collaborative support, guided practice, and reflection, thereby helping teachers translate professional learning into more effective instruction.

Meaningful participation in professional learning communities promotes knowledge-sharing, collaboration, reflective dialogue, and continuous learning. Teachers who actively participate in these communities can examine common instructional concerns, learn from their colleagues' experiences, and collectively develop strategies for improving practice. Evidence indicates that participation in professional learning communities can positively influence teachers' instructional skills by strengthening collaboration, reflection, and shared professional responsibility (Ohayon & Albulescu, 2023).

Systematic monitoring and evaluation are essential for determining whether professional development activities are properly implemented and whether they contribute to changes in teaching practice. Schools should examine teachers' professional needs, attendance and participation, the relevance of session content, the quality of implementation, and the application of acquired learning in the classroom. Govender and Ajani (2021) found that insufficient monitoring and evaluation can limit the effectiveness of teacher

professional development and recommended assessing teachers' needs and the quality of the activities provided. An evidence-based monitoring system is therefore necessary to support accountability and continuous improvement in LAC implementation.

Teachers' professional knowledge is demonstrated through instructional planning, assessment design, classroom instruction, differentiation, and the appropriate selection of teaching strategies. Improvements in these areas may serve as indicators of the contribution of professional development to teacher performance. Within Philippine elementary schools, extensive SLAC implementation in content and pedagogy, learner diversity, assessment and reporting, curriculum contextualization, and technology integration has been associated with teachers' perceived professional growth (Deala & Lopez, 2024). Quality professional learning may therefore be reflected in improved lesson plans, instructional materials, assessment tools, action plans, and classroom innovations.

Effective professional development requires alignment among program objectives, content, learning activities, teacher participation, assessment, and intended outcomes. Reviews of teacher-development programs recommend examining not only participants' perceptions but also the implementation process, teacher interactions, professional outputs, and evidence of changes in practice (Huang et al., 2022). In the Philippine setting, Eborde and Escote (2024) observed that the quality of LAC facilitation, resource speakers, learning materials, follow-up support, mentoring, and coaching can influence how effectively professional learning is translated into teachers' work. These findings reinforce the need for a structured approach to planning, implementing, documenting, and evaluating LAC sessions.

Effective teaching requires the integration of subject-matter knowledge, pedagogical understanding, learner awareness, and professional judgment. A contemporary review of pedagogical content knowledge explains that teachers must do more than possess knowledge of a subject; they must transform that knowledge into forms that learners can understand and apply (Hiscox & Berry, 2024). Professional development should therefore strengthen teachers' content knowledge, pedagogical competence, assessment literacy, leadership capacity, and ability to make context-sensitive instructional decisions. Collaborative environments can further support this development by enabling teachers to examine problems of practice and learn from one another.

Changes in classroom practice are more likely to occur when professional development includes coaching, mentoring, opportunities for application, and constructive feedback. Elfarargy et al. (2022) found that instructional coaches can strengthen professional learning communities by establishing supportive learning environments and guiding activities that enhance teachers' instructional capacity. Reflection also allows teachers to examine how newly acquired knowledge works in actual classroom situations and identify the adjustments required. Coaching and reflective practice consequently help bridge the gap between participation in professional development and the sustained application of learning.

Professional learning communities can contribute to changes in teaching practices when teachers collaboratively examine instruction, reflect on learner needs, and develop context-appropriate solutions. In a Philippine study, teachers reported that LAC sessions supported classroom instruction through lecture-discussions, coaching, workshops, and collaborative activities addressing content knowledge, pedagogy, assessment, learner diversity, and the learning environment (Pilo, 2024). Evidence of professional growth may therefore be found in improved instructional practices, stronger collaboration, newly developed materials, and classroom innovations arising from LAC participation.

Communities of practice depend on active participation, shared leadership, collaboration, mutual accountability, and a sustained focus on improving learner outcomes. DuFour et al. (2024) explained that effective professional learning communities develop shared professional knowledge, examine teaching practices and student learning, and convert collective learning into concrete actions for school improvement. Similarly, successful LAC implementation requires teachers and school leaders to assume clearly defined responsibilities, maintain supportive relationships, and use the results of their collaborative inquiry to guide

instructional decisions.

Teachers' participation in professional development can be constrained by heavy workloads, conflicting responsibilities, limited time, insufficient financial support, and inadequate access to relevant programs. Findings from TALIS 2024 indicate that time pressures arising from teachers' other commitments remain one of the most commonly reported barriers to professional learning (OECD, 2025). These limitations may affect teachers' attendance, preparation, participation, and ability to apply what they have learned. Schools should therefore provide adequate time, resources, administrative support, relevant learning opportunities, and systematic follow-up to make LAC sessions sustainable and effective.

Collaboration, leadership support, systematic monitoring, and a positive school climate are important conditions for sustained school improvement. Leaders strengthen professional learning when they cultivate trust, encourage knowledge-sharing, allocate appropriate resources, and establish structures through which teachers can collaborate meaningfully. Evidence from primary schools indicates that instructional leadership can foster the development of professional learning communities, particularly when leadership practices contribute to a supportive and collaborative school climate (Hua et al., 2024). These conditions are essential for addressing barriers to LAC implementation and maximizing the benefits of teacher collaboration.

Professional learning communities support continuous improvement by enabling teachers to discuss teaching practices, curriculum requirements, learner assessment, and appropriate instructional interventions. Within the Philippine context, LAC sessions can serve as structured opportunities for teachers to strengthen their instructional mastery and pedagogical efficacy through collaborative learning. Tomogon and Lactam (2024) found that well-implemented SLAC activities were associated with teachers' instructional skills and pedagogical effectiveness. Professional learning activities should therefore remain focused on relevant content, actual classroom concerns, and instructional strategies that respond to learners' needs.

Professional learning communities can contribute to improvements in teaching practice by allowing educators to jointly examine instructional problems and construct professional knowledge through interaction. From a social-constructivist perspective, learning develops through engagement with other people, shared tools, and the surrounding environment. Murphy and Martin (2024) demonstrated how socially situated exploration and reflective practice supported educators' professional learning through collaborative experiences. School leaders can strengthen this process by encouraging teacher participation, professional dialogue, shared decision-making, and collective responsibility for instructional improvement.

Experiential professional learning involves moving through interconnected processes of concrete experience, reflection, conceptual understanding, and practical experimentation. Teachers learn more meaningfully when they are allowed to examine actual classroom experiences, reflect with colleagues, develop possible explanations or solutions, and test revised strategies in practice. An evaluation of a professional development program on experiential pedagogy found that active collaboration, demonstrations of pedagogy in practice, technology-supported learning, feedback, and reflective scaffolding were important features of teachers' learning experiences (Patwardhan & Abrol, 2023). These findings support the use of reflective and collaborative approaches during LAC sessions.

Professional development is more useful when its content is relevant to teachers' classroom contexts, aligned with curriculum requirements, and sustained long enough to support changes in practice. LAC sessions should therefore address identified instructional needs and provide opportunities for teachers to develop, implement, and refine appropriate interventions. In their examination of the SLAC program in Batuan District, Almonicar and Padasas (2022) highlighted its role in supporting teachers' professional learning and school-based instructional improvement. LAC activities must consequently move beyond procedural compliance and provide teachers with practical assistance for strengthening their competencies and adopting innovative teaching practices.

Collaboration, professional reflection, and collective learning are central to effective teacher

development. Professional learning communities are most productive when teachers assume leadership roles, share expertise, mentor colleagues, and collectively respond to problems of practice. According to Tengku Ariffin et al. (2024), teacher leadership and professional learning communities have a mutually reinforcing relationship: PLC participation can develop teachers' confidence and leadership capacity, while teacher leaders can strengthen collaborative learning and instructional improvement within the community. LAC sessions reflect this relationship by creating a school-based structure in which teachers can learn with and from one another.

Teachers' active participation is essential to the success of collaborative professional development. Participation involves more than attending scheduled sessions; it requires teachers to contribute ideas, examine evidence, engage in reflective dialogue, undertake agreed-upon activities, and apply professional learning in their classrooms. Collective participation has been shown to influence how teachers experience professional learning and how effectively they adopt and implement newly learned practices (Evert & Stein, 2022). LAC facilitators should therefore create inclusive conditions that encourage every teacher to participate meaningfully in collaborative inquiry and reflection.

Professional knowledge is constructed and refined through interaction, participation, and shared experience. In communities of practice, teachers can discuss instructional challenges, compare perspectives, jointly create resources, and develop contextually appropriate solutions. Research on experiential professional development found that collaboration, lesson planning, materials development, classroom application, feedback, and self-reflection helped teachers strengthen their pedagogical knowledge and instructional delivery (Ajani, 2023). These processes demonstrate how social interaction and shared practice can transform individual experiences into collective professional knowledge.

Professional learning becomes more effective when teachers apply newly acquired knowledge and strategies in authentic classroom situations. Practical application allows them to determine whether an approach is suitable for their learners, identify implementation difficulties, gather feedback, and refine their teaching. Voelkel et al. (2023) found that coordinated leadership and instructional coaching were important in guiding professional learning communities through systemic change and strengthening teachers' capacity. LAC sessions should accordingly connect collaborative discussions with coaching, classroom application, follow-up support, and evidence-based reflection.

The professional learning community model emphasizes collaboration, collective leadership, continuous learning, and the application of professional knowledge. These elements become especially important when teachers work across classrooms or schools to address shared instructional concerns. Ho et al. (2025) found that individual and collective leadership within networked learning communities contributed to participants' professional learning and supported the learning of their peers. LAC sessions can similarly strengthen teachers' competencies when they provide authentic opportunities for collaboration, shared leadership, contextualized professional learning, and the classroom application of collaboratively developed strategies.

Professional development is more effective when its content is relevant to teachers' instructional responsibilities, coherent with school priorities, and responsive to classroom concerns. Teachers are more likely to engage in professional learning when activities provide practical strategies for addressing problems they encounter in planning, instruction, assessment, and learner support. In a large international analysis, Zhang et al. (2024) found that teachers differed in how they perceived the characteristics of effective professional development, demonstrating the need to design learning experiences that accommodate teachers' particular contexts and needs. LAC topics should therefore be selected through systematic needs assessment and aligned with teachers' instructional responsibilities.

Antinluoma et al. (2021) identified leadership support, shared vision, reflective professional dialogue, distributed responsibility, and a collaborative school culture as important features of professional learning

communities. Their review further indicated that teachers' collective learning is strengthened when professional discussions focus on teaching practices, pedagogical knowledge, learner achievement, and instructional challenges. These findings provide a relevant theoretical basis for implementing LAC sessions as a structure for school-based, collaborative professional learning.

Professional development should be content-focused, collaborative, practice-oriented, and sustained over time if it is to contribute meaningfully to classroom instruction. Short, isolated training activities offer limited opportunities for teachers to test new strategies, evaluate their effects, and make appropriate adjustments. By contrast, professional learning communities allow teachers to engage in continuing dialogue, collaborative inquiry, and the systematic improvement of practice. A contemporary review concluded that PLC research consistently emphasizes shared knowledge construction, collective examination of practice, and context-sensitive approaches to teacher learning and school improvement (Chiang et al., 2024). These characteristics are consistent with the continuing and teacher-led nature of LAC sessions.

Professional learning communities can serve as drivers of instructional improvement by cultivating shared leadership and collective responsibility. Teachers contribute more meaningfully to school improvement when they are empowered to identify instructional concerns, lead collaborative inquiries, mentor colleagues, and participate in decisions concerning teaching and learning. Alimujiang et al. (2024) found that informal leadership practices within a teacher-driven PLC helped educators negotiate organizational barriers and exercise greater professional agency. Accordingly, successful LAC implementation requires both formal administrative support and meaningful opportunities for teachers to assume leadership responsibilities.

Nguyen et al. (2024) reviewed 27 Scopus-indexed studies published between 2019 and 2024 and identified a growing research focus on professional learning communities, leadership, professional growth, and collaborative learning. Their review demonstrates that PLCs have become an important structure for teachers' continuing professional development. For LAC sessions to contribute to school improvement, however, they must be systematically organized around clearly identified instructional priorities, relevant learner-performance evidence, and specific professional learning objectives.

A meta-analysis of 44 independent samples involving 38,669 participants found a statistically significant positive relationship between professional learning communities and teachers' efficacy beliefs. A collective focus on student learning and reflective professional dialogue emerged as particularly important PLC dimensions (Liu et al., 2025). These findings suggest that LAC sessions may contribute to instructional improvement by strengthening teachers' confidence in their individual and collective capacity to address teaching challenges and improve learner outcomes.

Professional learning communities may also influence teacher performance through shared vision, supportive leadership, collective learning, enabling conditions, and the exchange of classroom practices. Mydin et al. (2024) found that all five of these PLC dimensions were positively associated with teacher performance among public primary school teachers. Their findings emphasize that collaboration should extend beyond discussion and lead to the practical application of professional knowledge. LAC sessions can support this process by enabling teachers to jointly design interventions, reflect on their implementation, and refine instructional practices.

The importance of LACs became particularly evident during the transition to distance and flexible learning, when teachers had to rapidly adjust instructional materials, communication practices, assessment methods, and technology use. A phenomenological study of teachers participating in online LAC sessions showed how these school-based professional learning activities provided opportunities to exchange experiences, discuss implementation difficulties, and develop strategies for online instruction (Francisco, 2022). This experience illustrates the capacity of LACs to support teacher learning during educational disruptions and changing modes of instruction.

More recent DepEd guidance continues to recognize LACs as appropriate platforms for professional learning, collaborative material development, and the contextualization of instruction. DepEd Memorandum No. 8, s. 2023, for example, incorporates LAC participation, assessment evidence, learner-progress monitoring, and teacher-developed instructional resources within the Results-Based Performance Management System aligned with the Philippine Professional Standards for Teachers (Department of Education, 2023). Thus, regular LAC sessions, appropriate documentation, alignment with school-improvement priorities, and the use of learner-performance data can help schools address instructional gaps and strengthen teacher performance.

Vega and Antriman (2025) examined the implementation of LAC as an in-house professional development program for science teachers working in geographically remote Philippine schools. Their findings showed that LAC sessions provided opportunities for teachers to strengthen their content knowledge, pedagogical skills, facilitation techniques, research capacity, and professional leadership. The collaborative nature of the sessions also helped establish a community in which science teachers could exchange knowledge and develop context-responsive instructional practices.

Using a qualitative multiple-case-study design, Opeña and Lagura (2025) investigated LAC practices in elementary, secondary, and integrated schools across the Davao Region. Common practices included collaborative planning, needs-based topic selection, teacher-led discussions, reflection, and informal monitoring. However, the participants also reported scheduling conflicts, heavy workloads, limited resources, and insufficient trust among colleagues. The findings demonstrate that LAC implementation can support instructional improvement and collaborative problem-solving, although its effectiveness depends on supportive leadership, appropriate scheduling, and adequate resources.

Lugtu (2023) investigated SLAC practices and their relationship with teachers' professionalism and school performance. The study emphasized the importance of aligning SLAC activities with teachers' competency needs and incorporating their results into school-improvement planning. Its findings suggest that systematically implemented LAC sessions can contribute to professional competence by helping teachers strengthen instructional planning, classroom practices, assessment, and their ability to respond collaboratively to school concerns.

Recent Philippine evidence also connects LAC participation with the effective use of technology in instruction. Dela Torre and Orongan (2026) examined LAC engagement, technology-integration effectiveness, and instructional-delivery practices among 312 public school teachers in Bukidnon. Although technology integration emerged as the strongest predictor of instructional delivery, the study showed that teachers were highly engaged in LAC activities and used these sessions as part of their continuing professional learning. The findings indicate that LAC sessions should intentionally connect collaborative professional development with technology-supported pedagogy and classroom application.

The effects of SLAC programs on teachers' instructional competence in Misamis Oriental were examined by Antiola and Ferenal (2024). Their findings indicated that SLAC implementation contributed positively to teachers' instructional competence and provided the basis for developing a targeted professional development plan. The study demonstrates the value of using evidence from LAC implementation to identify areas for improvement and design professional learning interventions that respond directly to teachers' instructional needs.

Naungayan (2025) assessed LAC implementation and the competence of LAC leaders and facilitators in secondary schools in Ilocos Sur. Teachers rated the implementation process highly, particularly in relation to needs assessment, collaborative planning, session execution, monitoring, and adherence to relevant guidelines. The study nevertheless recommended a contextualized enhancement plan to strengthen planning, facilitation, monitoring, and evaluation. These results emphasize that the benefits of LAC sessions depend on both teacher participation and the competence of those responsible for organizing and facilitating the activities.

Using TALIS 2018 data from 127,339 teachers across 40 countries, Christensen and Jerrim (2025) examined the relationship between professional learning communities and teacher outcomes. Participation in PLCs showed a robust positive relationship with teachers' job satisfaction, although its relationships with self-efficacy and clarity of instruction were weaker and varied across national contexts. The findings suggest that collaborative professional learning can promote professional involvement and well-being, but its instructional effects depend on how the learning community is structured and implemented. This contextual variation is particularly relevant when considering LAC as a Philippine model of a professional learning community.

Anderson and Olivier (2022) quantitatively examined relationships among professional learning community dimensions, teacher self-efficacy, and collective efficacy across elementary, middle, and secondary schools. Their findings indicated that stronger perceptions of PLC practices were associated with teachers' beliefs in their individual and collective capacity to influence learning. This evidence helps explain how LAC sessions may contribute to instructional improvement: sustained collaboration, shared leadership, and collective problem-solving can strengthen teachers' confidence in addressing classroom challenges.

The role of collaboration in developing teacher efficacy was further demonstrated by Ninković et al. (2022), who found that trust among colleagues influenced collective teacher efficacy through the characteristics of professional learning communities. In the Philippine setting, Macapodi and Labitad (2025) reported a significant relationship between aspects of school-based LAC implementation and teaching-and-learning practices. Their study of 423 elementary and secondary teachers highlighted needs assessment, resource allocation, monitoring and evaluation, ICT integration, learner inclusion, and contextualized instruction as important areas for LAC implementation. Together, these findings clarify how trust, structured collaboration, and contextualized professional learning may connect LAC participation with improved instructional practice.

The literature and empirical studies reviewed indicate that well-implemented Learning Action Cell sessions can strengthen teaching through collaboration, reflection, professional dialogue, instructional leadership, and context-responsive learning activities. Local and international studies further show that professional learning communities are influenced by leadership support, facilitator competence, trust, adequate time and resources, systematic monitoring, and opportunities to apply learning in the classroom. Although existing studies have examined LAC implementation and its relationship with teacher competence, fewer studies have investigated how the complete implementation process—including planning, participation, facilitation, documentation, monitoring, and follow-up—serves as a foundation for improving instructional practice within a particular school.

There is also limited research focusing on LAC implementation in public elementary schools situated in developing, resource-constrained, or contextually distinct communities such as Bit-os Elementary School. Existing findings from other divisions and school settings cannot automatically represent the experiences, implementation conditions, and instructional needs of its teachers. This gap establishes the need to examine the extent to which LAC sessions have been implemented at Bit-os Elementary School and determine how their implementation has contributed to teachers' instructional practices.

Theoretical/ Conceptual Framework

The research was founded on the Professional Learning Community theory by DuFour & Eaker (1998). This was augmented by the Social Learning Theory by Bandura (1977) and Andragogy theory by Knowles (1984). All these theories were fundamental in establishing the process through which teachers learn, interact with peers, and continue to improve themselves as professionals by participating in LAC sessions. The application of all these theories helps to clarify the process of professional learning that happens in school-based learning communities and its impact on instruction and development of teachers.

Professional Learning Community Theory asserts that sustainable school improvement is achieved when educators work together, share professional duties, reflect on their instructional practices, and seek continuous learning. The theory stresses the significance of collective inquiry, collaborative problem-solving, and shared commitment for improving learner outcomes. In relation to the current study, Learning Action Cell sessions provided a professional learning community where teachers collectively discussed instructional issues, reviewed learners' performances, shared practices, and planned appropriate intervention measures. Through such interactions, teachers participated in continuous professional learning that enhanced instructional practices and helped them attain school improvement objectives.

In support of the above perspective, Social Learning Theory argues that learning involves observation, modeling, imitation, and social interaction. Teachers learn new knowledge and skills through observation of what their peers do, participation in professional discussions, coaching, mentoring, and collaboration. In the Learning Action Cell environment, teachers learned from each other through lesson sharing, peer coaching, reflection, and professional experience exchange. Through these collaborative interactions, professional relationships among teachers were strengthened, thus promoting the transfer of effective teaching practices in the school.

Similarly, the Andragogy Theory offers a model through which adult learners' participation in professional development programs can be understood. According to Knowles, adult learners tend to benefit most from professional development experiences that relate to their work duties, are related to real-world problems, and are immediately beneficial to them. This concept is captured by the practice of carrying out Learning Action Cell sessions in Bit-os Elementary School, where professional development activities revolved around the development of literacy and numeracy skills, assessment skills, implementation of the curriculum, taking care of learners, innovative instruction, and other matters related to the school.

With these theoretical underpinnings as its guide, the IPO Model was used as the study's conceptual framework. This is represented by the flow diagram which explains the process wherein documentary data on the implementation of the Learning Action Cell program in the school were systematically examined in order to identify the professional development approaches of the teachers in Bit-os Elementary School. The input aspect was made up of documentary data collected from the Learning Action Cell program implementation of the school in School Years 2023-2024 to 2025-2026. These included Learning Action Cell program plan, session guide, action plan, attendance sheet, minutes of meeting, accomplishment report, monitoring and evaluation report, reflection journal, mentoring and coaching plan, intervention plan, instructional materials, Reading and Mathematics Assessment reports, Phil-IRI reports, and others.

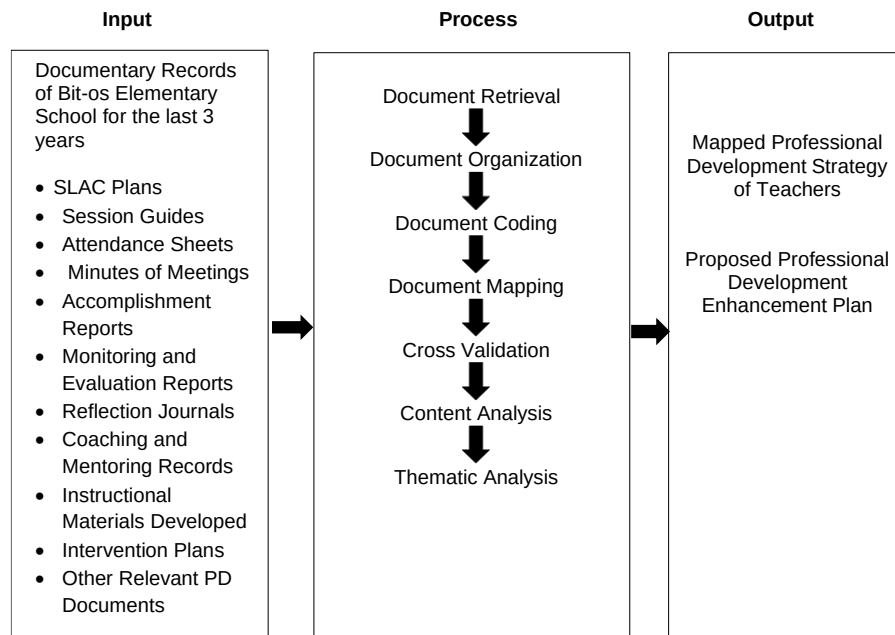
The process aspect entailed systematic search, organization, classification, coding, mapping, validation, and analysis of documentary data. Using document analysis and document mapping, information about professional development activities, issues discussed, people involved, pedagogical strategies employed, enrichment of the subject matter, teacher professional development, evaluation findings, strengths and challenges associated with the implementation of the same were determined. In order to enhance the accuracy and validity of the information, the information collected from a certain documentary source was validated using other documentary sources such as attendance list, minutes of meeting, achievement report, monitoring report, coaching record, and teacher journal. The mapped information was analyzed using content and thematic analysis.

The output aspect of the framework comprised of the mapping of professional development strategies carried out through Learning Action Cell sessions at Bit-os Elementary School and the proposed Professional Development Enhancement Plan. The mapped profile gave a detailed account of the professional development strategies in place while the enhancement plan gave a strategic direction on how to strengthen the implementation of Learning Action Cell sessions and ensure the professional development of teachers at the school. Using the framework, it became possible to evaluate the impact of the professional development

activities carried out by the school on the learning and development of teachers.

Figure 1 shows the Input-Process-Output (IPO) model used in the study. The framework gives a clear account of how the documentary accounts relating to the implementation of Learning Action Cells were mapped and analyzed to develop a comprehensive profile of the professional development strategies of teachers at Bit-os Elementary School and form the basis of the proposed Professional Development Enhancement Plan.

Figure 1. The Schematic Diagram



Objectives of the Study

This study sought to determine the following objectives: (1) map the professional development activities implemented through Learning Action Cell (LAC) sessions at Bit-os Elementary School in terms of topics and activities, objectives, participants, outputs, frequency of implementation, and pedagogical approaches used over the last three school years; (2) determine the extent of implementation of LAC sessions in terms of topics discussed, participants involved, pedagogical approaches used, and enrichment of content and professional learning focus; (3) identify evidence of teacher professional growth resulting from the implementation of LAC sessions; (4) evaluate the effectiveness of LAC sessions based on the documented evaluation results; (5) examine the strengths and challenges evident in the implementation of LAC sessions based on documentary evidence and teacher reflections; and (6) develop a Professional Development Enhancement Plan based on the mapping and evaluation results to strengthen the professional development strategies of teachers through LAC sessions.

Methodology

The study utilized a mixed-method descriptive research design incorporating documentary analysis, document mapping, content analysis, and thematic analysis to examine the professional development strategies implemented through Learning Action Cell (LAC) sessions at Bit-os Elementary School over three

school years. The study involved 16 teachers from Key Stages 1 and 2 who participated in the school's LAC sessions, while documentary records from School Years 2023–2024 to 2025–2026 served as the primary data sources. A researcher-developed and expert-validated Document Analysis Matrix (DAM) was employed to systematically extract, code, categorize, and map data from School-Wide SLAC Plans, session guides, action plans, attendance sheets, minutes of meetings, accomplishment and monitoring reports, teacher reflection journals, coaching and mentoring records, assessment reports, intervention plans, instructional materials, training outputs, and other Means of Verification. LAC Session Evaluation Forms were also analyzed as secondary data to determine the extent of implementation and effectiveness of the sessions. Documentary evidence was cross-validated across multiple sources to enhance the credibility and consistency of the findings. For data analysis, frequency counting and document mapping were used to identify patterns in professional development activities, content analysis and thematic analysis were employed to examine teacher professional growth and implementation strengths and challenges, and mean scores were computed to determine the extent of LAC implementation and effectiveness. The synthesized findings served as the basis for developing the proposed Professional Development Enhancement Plan.

Results and Discussion

Problem 1. What professional development activities is reflected in the topics/activities, objectives, participants, outputs, frequencies and pedagogical approaches used over the last three school years of Bit-os Elementary School?

Table 1. *Comprehensive Professional Development Activities for the school year 2023–2024*

Theme	Topics/ Activities Conducted	Objectives	Participants	Outputs	Frequency	Pedagogical Approaches Used
Professional Growth and Policy Implementation	1. SLAC Orientation,	Build teacher competence in	7 K–3 Teachers, 9	Lesson plans, 8 instructional materials,	8	Collaborative Learning/Peer Mentoring, ICT
	2. Effective Teaching Strategies,	literacy and numeracy, strengthen	Grades 4–6 Teachers, 1	compliance reports		Integration, Differentiated
	3. Differentiated Instruction,	classroom management,	School Principal			Instruction
	4. Classroom Management,	promote learner welfare, and align				
	5. SBM Practices,	instruction with				
	6. DepEd Curriculum Policies,	DepEd policies.				
	7. Instructional Materials Development					
	8. Enhancement Planning, Year-End Evaluation & Best Practices Sharing					

Literacy and Reading Strategies	1. Reading Strategies, 2. Science of Reading, 3. Phonological Awareness, 4. Phonics Instruction, 5. Reading Fluency, 6. Vocabulary Development 7. Reading Comprehension, 8. MTB-MLE Integration, 9. Reading Intervention, 10. Literacy Across Curriculum	Strengthen literacy instruction and learner reading performance.	Same participants	Lesson plans, phonics worksheets, intervention materials	10	Differentiated Instruction
Numeracy and Math Assessment	1. Early Numeracy Concepts, 2. Numeracy Operations, 3. Numeracy Intervention	Improve learners' numeracy skills and mathematical competence.	Same participants	Numeracy worksheets, assessment tools	3	Differentiated Instruction, Data-Driven Instruction
Assessment Literacy and Intervention	1. Formative Assessment, 2. Remediation Strategies, 3. Learner Progress Monitoring, 4. ELLNA Data Review	Enhance teachers' use of assessment data to improve instruction.	Same participants	Assessment tools, monitoring reports	4	Data-Driven Instruction
Child Protection and Learner Welfare	1. Child Protection Policy, 2. VAWC Awareness, 3. Mental Health Awareness, 4. Writing Skills Development 5. ICT Integration in ELLN	Promote learner welfare, inclusive education, and holistic development.	Same participants	Compliance reports, intervention materials	5	Inclusive Education Practices, ICT Integration

Source: LAC Reports of Bit-os Elementary School (2023–2026); compliance with DepEd Order No. 35, s. 2016 and DepEd Order No. 12, s. 2015.

The professional development exercises carried out during the School Year 2023-2024 showed how Bit-os Elementary School took advantage of the Learning Action Cell (LAC) sessions to take care of the real

needs of their teachers and learners. The school did not carry out trainings just for the sake of meeting the requirements but used the LAC as a platform where the teachers could talk about problems in the classroom and share their experience on how to solve them. This is in line with the function of the Learning Action Cell as described by Naungayan (2025).

One of the most obvious priorities throughout the school year was the development of literacy skills. Ten sessions were spent focusing on various aspects of literacy, which include phonological awareness, phonics, reading fluency, vocabulary development, reading comprehension, and reading intervention. The high level of prioritization indicated that many learners at Bit-os Elementary School experienced challenges when reading and comprehending texts. In response to such difficulties, teachers relied on LAC to expand their literacy knowledge and create intervention material for those learners who have challenges. This constant emphasis on literacy can be explained by the desire of the school to ensure that learners will acquire necessary skills to excel in all subjects. This interpretation is supported by Opeña and Lagura (2025).

Professional development and policy implementation were other aspects where time was spent aside from reading. Discussions on differentiated instruction, classroom management, development of instructional materials, School-Based Management and curriculum policies helped teachers to constantly improve their instructional processes and keep themselves updated with DepEd programs and requirements. This was especially important in order to enable teachers to address the learning needs of the diverse population in their classes. Active participation of teachers in such discussions indicated an environment wherein learning was seen as a collective responsibility. According to Zhang et al. (2024), relevant, context-responsive professional development is an important component of teacher effectiveness and instructional improvement.

The learning from the assessment literacy sessions also included a greater emphasis on the use of data to drive instruction. Through the discussions regarding formative assessment, remediation, learner progress monitoring, and analysis of ELLNA data, the teachers developed an appreciation for the need to recognize learning gaps and provide interventions. Instead of focusing only on periodic tests, the teachers realized the importance of basing their instructions on assessments (Govender & Ajani, 2021).

Another significant part of the LAC implementation at the school was the learner's welfare. Sessions related to child protection, mental health, and VAWC awareness pointed out the awareness of the school regarding the importance of learners feeling safe and valued for them to learn effectively. In many ways, the discussions revolved around the reality that teachers encounter at schools. Teachers deal with many things apart from academics. The discussions on child protection and mental health awareness strengthened the school's dedication to providing a safe and nurturing learning environment consistent with professional ethics, learner inclusion, and responsiveness to learner diversity (Macapodi & Labitad, 2025).

While numeracy-based sessions were not many in number, they were still considered an integral part of the professional development program for the school. The talks on early numeracy principles, mathematical operations, and strategies to intervene proved that the teachers were also worried about enhancing the learners' mathematical abilities. The fact that these sessions were focused indicated that the school had specific numeracy needs (Pilo, 2024).

As a group, the LAC activities held in SY 2023-2024 show that the school has indeed addressed the needs of both the learners and teachers within it. Through the focus on literacy, it was seen that there is still much concern for the reading skills of the learners while the activities on assessment, professional development, and learners' well-being indicate the overall efforts of the school to enhance the quality of teaching and the level of learner support. With the outputs made from the activities, including the lesson plans, instructional materials, assessments, interventions, and monitoring, it became evident that the activities were followed by practical actions which have brought benefits for classroom instruction. Most importantly, the findings revealed the fact that the LAC has become an effective professional learning community of Bit-os Elementary School, where the teachers collaborated in order to enhance their practices and improve learning

outcomes for all learners. This reflects the essential practices of professional learning communities identified by Antinluoma et al. (2021).

Table 2. Comprehensive Professional Development Activities for the school year 2024–2025

Theme	Topics/ Activities Conducted	Objectives	Participants	Outputs	Frequency	Pedagogical Approaches Used
Professional Growth and Curriculum Implementation	1. MATATAG Curriculum Orientation, 2. MATATAG Teaching Strategies, 3. SBM Advancement, 4. DepEd Policy Updates, 5. Checking Forms QA 6. Year-End Evaluation, 7. Best Practices Sharing, 8.Strengthening ELLNA Utilization, 9. Remediation & ARAL Programs Roll-out, 11.Instructional Materials Development, 12.Enhancement Planning	Deepen curriculum alignment and strengthen instructional leadership.	9 Grades 4–6 Teachers, 7 K–3 Teachers, 1 School Principal	Governance reports, instructional materials	11	Collaborative Learning/Peer Mentoring
Literacy and Reading Strategies	1. Advanced Phonics Strategies, 2. Reading Comprehension & Deepening, 3.Paragraph Writing, 4.Vocabulary Expansion, 5. Reading Fluency Improvement, 6. MTB-MLE Strengthening, 7. Literacy Strategies, 8. Cross-Curricular Literacy	Expand literacy mastery and reading proficiency.	Same participants	Inclusive lesson plans, literacy materials	8	Differentiated Instruction
Numeracy and Math Assessment	1. Numeracy Mastery, 2.Numeracy Strategies	Strengthen numeracy competence and learner achievement.	Same participants	Assessment tools	2	Differentiated Instruction

Assessment Literacy	1.Assessment under MATATAG, 2.Classroom-Based Assessment, 3.Assessment Innovation, 4. Learner Progress Review, 5.Assessment Refinement, 6. Progress Monitoring, 7. ELLNA Data Analysis	Enhance assessment literacy and evidence-based instructional decisions.	Same participants	Learner monitoring templates, assessment reports	7	Data-Driven Instruction
Child Protection and Learner Welfare	1. Inclusive Education Practices, 2. Mental Health Programs, 3. Child Protection Strengthening	Strengthen inclusive practices and learner support systems.	Same participants	Inclusive lesson plans, compliance reports	3	Inclusive Education Practices
Emergency Preparedness and DRRM	1. Fire Safety & DRRM	Equip teachers with disaster preparedness competencies.	Same participants	DRRM reports	1	Collaborative Learning/Peer Mentoring
Instructional Innovation	1. ICT Integration & Intervention Enhancement, 2. ICT Tools in Instruction	Enhance technology-supported teaching and learning.	Same participants	Digital instructional materials	2	ICT Integration

Source: LAC Reports of Bit-os Elementary School (2023–2026); compliance with DepEd Order No. 35, s. 2016 and DepEd Order No. 12, s. 2015.

The professional development sessions held through the Learning Action Cell (LAC) for School Year 2024-2025 aligned with the emerging needs of Bit-os Elementary School. Throughout this period, the school emphasized the topics of Professional Growth and Curriculum Implementation, evidenced by the eleven sessions that were held in relation to this topic. The main reason for this is the application of the MATATAG Curriculum, which requires teachers to learn about new approaches to instruction, assessment, and policy changes. Using LAC sessions, teachers could work together in order to enhance curriculum alignment, planning of instruction, and development of instructional materials for implementation of the curriculum. This approach is consistent with the findings of Culajara (2023), who described LAC as a school-based professional development structure for addressing instructional gaps, exchanging practices, and attaining curriculum goals.

Even amid the transition towards curriculum implementation, the school maintained their emphasis on the issue of literacy. Literacy and reading strategy was discussed in eight of the sessions, showing that the teachers continue to have problems with learners struggling with literacy skills such as reading comprehension, vocabulary, and fluency. Understanding that reading is important not only for learning but also for any subject matter, the school made an effort to help with this issue by discussing advanced phonics, MTB-MLE enhancement, and cross-curriculum literacy strategies. This finding is consistent with research showing that LAC practices can strengthen teachers' ability to contextualize instruction, respond to learners' diverse needs, and improve their professional capacity (Dela Cruz & Baguio, 2024).

The issue of assessment literacy was also found to be significant in teacher professional development.

Seven workshops held in this topic revealed the intention of the school in enhancing the use of assessment data in their teaching and learning activities. Through discussions on classroom assessment, monitoring of learners' progress, innovations in assessments, and analyzing ELLNA data, teachers gained knowledge about how assessment data can help them in identifying gaps in learning and developing appropriate interventions. The creation of monitoring tools and assessment reports was indicative of the emerging culture of decision making based on evidence in the school. This finding reflects the professional development evaluation framework of Hiew and Murray (2024), which emphasizes follow-up support, comprehensive assessment, and evidence of program impact.

Even though there were only two sessions that covered numeracy and mathematical assessment, these activities pointed out to the continued dedication of the school to improve the learners' basic mathematics skills. Teachers talked about numeracy proficiency and interventions that would help the struggling learners understand basic mathematical concepts and operations. The targeted approach to these two sessions implies that there is a need to address certain learning challenges faced by the learners. Research on mathematics teachers' professional development similarly emphasizes the importance of integrating content knowledge, pedagogy, practical application, and assessment when addressing identified learning needs (Johari et al., 2022).

With the inclusion of sessions on instructional innovation on ICT integration, it is clear that Bit-os Elementary School was responding to the changing demands in education through the exploration of innovative technology-driven instructional practices. This shows that the school understood the changing demands for technology and its potential in facilitating more effective learning in the classroom (Akram et al., 2022).

Apart from the development of skills in instruction, Bit-os Elementary School also focused on issues related to learner welfare and safety. Sessions on inclusive education, mental health programs, child protection, and disaster risk reduction management show that the school was concerned with providing a safe and inclusive learning environment for all children. Child protection is particularly important and it is in line with the responsibility of schools to protect learners from abuse and violence. Research on SLAC implementation similarly identifies learner diversity, personal growth, professional development, and responsiveness to learners' needs as important areas of school-based professional learning (Deala & Lopez, 2024).

In general, the findings painted Bit-os Elementary School as a learning organization that effectively used the LAC in responding to real school needs and educational priorities. Although enhancing literacy was still among the pressing issues in the school, the implementation of the MATATAG Curriculum forced the school to consider more the alignment of the curriculum, assessment literacy, and instructional innovation. The different products developed by the LAC sessions were indicative of the fact that LAC sessions created useful products for use in classroom instruction and school improvement efforts. Collaborative professional development that remains attentive to curriculum, context, pedagogy, educational reforms, and teachers' needs can support continuous professional learning and improved instructional practice (Sancar et al., 2021).

Table 3. Comprehensive Professional Development Activities for the school year 2025-2026

Theme	Topics/Activities Conducted	Objectives	Attendance	Outputs	Frequency	Pedagogical Approaches Used
Professional Growth and Instructional Innovation	1. Advanced Teaching Strategies, 2. Curriculum Deepening,	Advance instructional innovation and institutionalize	8 Grades 4-6 Teachers, 8 K-3 Teachers, 1 School	SLAC portfolio, instructional innovations	8	Collaborative Learning/Peer Mentoring

	3. Best Practices Documentation4. RMA Orientation, 5. Best Practices Sharing, 6. Optimizing K-3 Classroom, 7. Principles of DAP, 8. Adult Learning for Capacity Building	best practices.	Principal			
Literacy and Reading Strategies	1. DAP-ELLN Sessions (Child Growth & Development), 2. Literacy Foundations, 3. Emerging Literacy Games, 4. Instruction Essentials, 5. Reading Code, Comprehension & Vocabulary, 6. Literature-Based Experiences, 7. Reading Development, Phil-IRI, Alphabet Knowledge, & Reading Intervention	Promote holistic literacy development and foundational reading skills.	Same participants	ECCD checklists, Phil-IRI reports, intervention materials	7	Differentiated Instruction
Numeracy and Math Assessment	1. Number Recognition Strategies, 2. Counting and Place Value, 3. Addition Strategies, 4. Subtraction Strategies, 5. RMA Administration, 7. Analysis of RMA Results and Numeracy Intervention Planning, 8. Problem-Solving Skills, 9. Differentiated Numeracy Instruction, 10. Manipulative-Based Learning, 11. Numeracy Assessment Strategies, 12. Math Fluency Development, 13. Contextualized Numeracy Activities, 14. Interactive Math Strategies,	Strengthen numeracy assessment, intervention, and remediation programs.	Same participants	CRLA results, RMA reports, instructional materials	18	Data-Driven Instruction, Differentiated Instruction

	15. Midyear RMA Evaluation, 16. Computation Skills Enhancement, 17. Numeracy Operations, Place Value, Multi-Digit Addition/Subtraction, 18. Math Remediation					
Assessment Literacy	1. Data-Driven Instruction, 2. Progress Monitoring, 3. Intervention Effectiveness Review, 4. Year-End RMA Review, 5. Developmental Screening, Informal Assessment Tools, 6. Intervention Planning	Improve data utilization and evidence-based instructional planning.	Same participants	Monitoring reports, assessment records	6	Data-Driven Instruction
Child Protection and Learner Welfare	1. Mental Health & Wellness, 2. Child Protection Refresher	Promote safe, supportive, and inclusive learning environments.	Same participants	Compliance reports, wellness records	2	Inclusive Education Practices
Emergency Preparedness and DRRM	1. Basic First Aid, 2. Fire Emergency Response	Strengthen emergency preparedness and response capabilities.	Same participants	Safety and DRRM reports	2	Collaborative Learning/Peer Mentoring
Instructional Innovation and ICT Integration	1. ICT Integration in Numeracy, 2. Remediation for Struggling Learners	Enhance technology-supported instruction and targeted intervention.	Same participants	ICT-integrated lesson plans, intervention materials	2	ICT Integration

Source: LAC Reports of Bit-os Elementary School (2023–2026); compliance with DepEd Order No. 35, s. 2016 and DepEd Order No. 12, s. 2015.

Contrary to the former academic years whereby the areas of literacy and implementation of curriculum were highly prioritized in the LAC sessions, during the current period, there seems to be a greater emphasis on numeracy assessment and intervention. This implies that the priorities of the school changed based on the new data obtained from the learners' performance.

The most important issue is that there were eighteen LAC sessions on Numeracy and Math Assessment, which became the most dominant topic discussed during the current school year. The topics of discussion included number recognition, place value, computation, problem-solving, differentiated numeracy instruction, intervention, and Results Monitoring Assessment (RMA). This high frequency of discussions indicates that the teachers noticed numeracy as one of the areas where learners encounter numerous

problems. Classroom and RMA assessments could reveal weaknesses in learners' mathematics knowledge leading to a great amount of time spent on teachers' development in this area.

The numeracy interventions are indicative of the focus by the school towards making sure that learners acquire the necessary skills in mathematics to be able to learn higher level concepts. Instead of only recognizing deficiencies in the learners, the teachers were involved in the analysis of data and developing intervention plans to address the problems. This is clear from the production of the RMA report, CRLA test results, and the instructional resources produced from the sessions. This conforms with the findings of Antiola and Fernal (2024), who emphasized that evidence from LAC implementation can be used to identify instructional needs and develop targeted professional development interventions.

While numeracy became the main area of concern, there was continued attention directed to the development of literacy among the learners. Seven of the sessions were related to Literacy and Reading Strategies and included areas like the foundations of literacy, emerging literacy games, reading comprehension, vocabulary development, Phil-IRI, and reading intervention. The document suggests that literacy remained a key issue of concern especially among learners at the elementary level since reading lays the foundation for learning.

The fact that the school chose to include sessions for both DAP and ELLN further emphasizes its dedication to ensuring proper support for learners based on their development. Teachers have been given opportunities to develop knowledge of child growth and development as well as use age-appropriate methods in teaching literacy. This supports the position of Hiscox and Berry (2024) that effective teaching requires teachers to transform their content knowledge through appropriate pedagogical approaches that make learning understandable and responsive to learners.

Another important aspect of the LAC training program was the emphasis on Professional Growth and Instructional Innovation, which constituted eight sessions. Conversations about more sophisticated teaching approaches, deepening of curriculum content, documentation of best practices, optimization of the classroom environment, and adult learning show how hard efforts were made to empower teachers' leadership and to institutionalize good classroom practices at the school level. Holding best practice sessions demonstrated that not only did the teachers gain new knowledge; they also contributed their own successes and innovations. It implies that professional learning community reached its maturity stage when teachers learn from each other and continuously improve their practices. Evert and Stein (2022) similarly emphasized that collective participation in professional learning supports teachers' uptake and classroom implementation of newly developed practices.

Assessment Literacy was yet another essential element of the school's professional development initiatives. Using training related to data-informed instruction, progress monitoring, intervention evaluation, developmental screening, and intervention planning, educators enhanced their capacity to utilize learner assessment outcomes to make instructional decisions. This is reflective of the growing culture of evidence-based practice at the school where all interventions and instructional modifications would be made based on the learner performance data, not conjectures. This is consistent with Department of Education (2023) guidance emphasizing the use of assessment evidence and learner-progress results in monitoring achievement and improving teachers' instructional practices.

Besides the above mentioned topics, which are mainly related to learning issues, there were other important matters which were focused on the learners' well-being and safety in Bit-os Elementary School. The topics, such as Mental Health and Wellness and Child Protection Refresher, are evidence of the school's effort to provide an effective and child-friendly learning environment. Moreover, through the discussions about those topics, the school showed the importance of the teacher's role in providing the learners with their social, emotional, and psychological needs, apart from the academic needs.

The presence of Emergency Preparedness and DRRM topics is an example of the school's efforts to be

well-prepared in case of any emergencies.

In addition to this, the way that the sessions regarding the topics of Instructional Innovations and ICT Integration were conducted, indicated that teachers were using technology to its fullest extent to facilitate learning. The planning and development of ICT-integrated lessons and intervention materials demonstrated attempts to make instruction more interesting and learner-centered.

In general, the professional development sessions conducted in SY 2025-2026 turned out to be more oriented toward overcoming numeracy problems and still keeping its long-standing dedication to literacy and teacher development. The huge number of sessions aimed at numeracy suggests that learner achievement in mathematics has become an urgent matter and thus needed immediate attention. Nevertheless, the dedication to literacy, assessment, well-being of learners, and instruction innovation shows that BES has taken a balanced approach to the issue of school development. It can be concluded that the products generated by BES such as RMA reports, intervention materials, instructional innovations, and monitoring records show that LAC sessions have been used by BES as tools for taking action in classrooms.

Table 4. *Summary of Professional Development Activities from school year 2023–2026*

Theme	Major Topics/ Activities Conducted	General Objectives	Participants	Major Outputs	Total Frequency	Pedagogical Approaches Used
Professional Growth, Policy Implementation, and Instructional Innovation	SLAC Orientation, Effective Teaching Strategies, MATATAG Curriculum Orientation, Curriculum Deepening, SBM, Policy Updates, Best Practices Sharing, Instructional Materials Development, Adult Learning, DAP, Classroom Optimization	Strengthen teacher competence, curriculum implementation, instructional leadership, and institutionalize best practices	16 Teachers and 1 School Principal	Lesson plans, governance reports, SLAC portfolios, instructional innovations, instructional materials	27	Collaborative Learning, Peer Mentoring, ICT Integration, Differentiated Instruction
Literacy and Reading Strategies	Reading Strategies, Science of Reading, Phonics, Reading Comprehension, Vocabulary Development, MTB-MLE, Literacy Foundations, Literacy Games, Phil-IRI, Reading Intervention	Improve literacy instruction, reading proficiency, and foundational literacy skills	Same participants	Literacy materials, phonics worksheets, Phil-IRI reports, ECCD checklists, intervention materials	25	Differentiated Instruction
Numeracy and Math Assessment	Early Numeracy, Numeracy Operations, Number Recognition, Place Value, Problem Solving, RMA	Strengthen numeracy skills, assessment, intervention, and remediation	Same participants	Numeracy worksheets, RMA reports, CRLA results, assessment	23	Data-Driven Instruction, Differentiated Instruction

	Administration, Numeracy Intervention, Math Remediation	programs		tools, instructional materials		
Assessment Literacy and Intervention	Formative Assessment, Classroom-Based Assessment, Learner Progress Monitoring, ELLNA Review, Data Analysis, Intervention Planning	Improve assessment literacy and evidence-based instructional decision-making	Same participants	Assessment reports, monitoring templates, monitoring records, assessment tools	17	Data-Driven Instruction
Child Protection and Learner Welfare	Child Protection Policy, VAWC Awareness, Mental Health Programs, Inclusive Education Practices, Wellness Programs	Promote learner welfare, inclusive education, safety, and well-being	Same participants	Compliance reports, wellness records, inclusive lesson plans, intervention materials	10	Inclusive Education Practices
Emergency Preparedness and DRRM	Fire Safety, First Aid, Emergency Response, DRRM	Strengthen disaster preparedness and emergency response competencies	Same participants	DRRM reports, safety reports	3	Collaborative Learning, Peer Mentoring
ICT Integration and Instructional Technology	ICT Integration in ELLN, ICT Tools in Instruction, ICT Integration in Numeracy	Enhance technology-supported teaching, learning, and intervention programs	Same participants	Digital instructional materials, ICT-integrated lesson plans	4	ICT Integration

It was due to this increasing trend that the school's culture and practice of professional learning gradually developed more and more strongly. Instead of restricting professional development to mandatory activities, the school always sought to expand learning opportunities in order to cope with emerging learner requirements and teaching issues. This discovery confirms the findings of Ventista and Brown (2023) that professional development is most beneficial when it is collaborative, sustained over time, supported by coaching, and connected to teachers' professional practice.

The data revealed that Bit-os Elementary School was not only able to fulfill the policy wherein LAC became institutionalized as a school-based professional development program, but they even surpassed the minimum required practice in terms of conducting LAC twice a month. Extra sessions were also conducted to cascade and discuss any recent DepEd policies and other programs and memoranda. This is a clear indication that the school understood the significance of LAC not only as a compliance measure but also as an important platform for collaboration and professional discussion in order to improve teaching and learning. Through these LAC meetings, teachers had continuous opportunities to reflect on their practices and find possible solutions to the problems within the school (De Guzman et al., 2023).

Based on the pattern for the past three years, the main focus of professional development changed in

response to the requirements of the school. For instance, during SY 2023–2024, literacy became the main area of concern for the school. Many LAC sessions were held on reading instruction, phonics, literacy interventions, and reading assessments. With the help of discussion in collaborative teams, teachers created lesson plans and materials on reading and literacy that were further used in helping struggling students in the classroom. The emphasis on literacy is justified by the need of developing the necessary reading skills that form the basis for all learning. This is consistent with the findings of Vega and Antriman (2025), who emphasized the importance of strengthening teachers' content knowledge and pedagogical competence through context-responsive professional learning. The development and classroom application of relevant instructional strategies are likewise associated with more effective instructional delivery (Dela Torre & Orongan, 2026).

During SY 2024-2025, the implementation of the MATATAG Curriculum had a major effect on the course of LAC activities. Professional development sessions were conducted to facilitate the process of adapting to changes in the curriculum through topics relating to curriculum alignment, assessment, instruction planning, and policy updates. Literacy was still a focus, but more efforts were made towards the capacity building of teachers with regard to curriculum implementation and evidence-based assessments. Teacher collaboration involved the creation of learning materials, evaluation of learner performance, and sharing of best practices in teaching. It is evident that during the year, the school continued with the strategy of preparing the teachers for implementing education reforms. According to Huang et al. (2022), professional development programs can support curriculum and instructional change by strengthening teachers' knowledge, skills, professional practices, and capacity to implement new approaches.

A marked change was experienced by SY 2025–2026, as the emphasis of the concerns shifted towards numeracy. From classroom assessments, RMA scores, and monitoring tools, there were observable learning gaps in mathematics. Thus, the school further concentrated on numeracy teaching, intervention, remediation, and assessment. Teachers had discussions about number identification, place value, computation, problem solving, differentiated teaching, and intervention plans. There was an evident increase in the numeracy-related sessions, which indicated that the school's response to the learner performance data and the need to address the learning gaps via professional development. This result corroborates the findings of Mydin et al. (2024), who established that collective learning and the practical application of professional knowledge were positively associated with teacher performance. Anderson and Olivier (2022) also found that strong professional learning community practices were associated with teachers' individual and collective capacity to address instructional concerns.

Based on the sequence of the themes throughout the three years, it can be stated that the professional development activities were based on real needs within the school as opposed to just scheduling such activities at particular times. From the school documentation, it became clear that the themes of the professional development activities were determined by Phil-IRI outcomes, RMA reports, classroom observations, learner monitoring documentation and other assessment documents. From this, it is evident that the school was constantly assessing learner performance and then using the findings to come up with professional development themes. This is consistent with the framework of Sims et al. (2025), which emphasizes the importance of developing teachers' professional insights, instructional goals, classroom techniques, and opportunities for applying and refining practice.

Yet another noteworthy observation is the presence of topics such as Assessment Literacy and Intervention, Child Protection and Learner Welfare, Emergency Preparedness and DRRM, and ICT Integration in all the three years under analysis. From this, it is clear that Bit-os Elementary School recognized that teachers' professional development involved far more than just improving their instruction. The teachers were not only made capable of performing instruction-related tasks but also learned how to analyze and interpret the results of assessments, provide learner welfare, protect children from potential risks, prepare for any emergencies that may arise, and use information communication technologies in their instructional and

learning processes. The topics that covered mental well-being, child protection, and inclusive education indicate the school's belief that the learners' achievement was directly tied to their welfare. This approach is supported by Hua et al. (2024), who highlighted the contribution of a trusting, collaborative, and supportive school climate to teachers' professional learning and the development of effective learning communities.

The outputs generated over the three years also reinforced the impact that the LAC program had on its stakeholders. The lesson plans, instructional materials, literacy and numeracy intervention materials, assessment, monitoring, and governance reports, ICT-based lesson plans, coaching and instructional innovations were not just written for documentation purposes. They were used for teaching learners in the classroom, as well as in interventions, monitoring of learners, and improvement of schools. Literacy and numeracy intervention materials assisted teachers to provide specific assistance to those learners who struggled with learning. Assessment and monitoring reports assisted in tracking progress of learners and in making the necessary adjustments in instruction. This demonstrates how a professional learning community transforms collaborative discussions, assessments of learner needs, and shared professional knowledge into concrete actions for instructional and school improvement (DuFour et al., 2024).

Overall, the documentation revealed that the Bit-os Elementary School has managed to establish the Learning Action Cell as an ongoing professional development mechanism for teachers. The rise in numbers of activities and participation by teachers, evidence-based planning, and conducting of LAC meetings beyond the minimum requirement suggest that there exists a robust professional learning culture within the school. More importantly, the evolution in the process from discussions on literacy-related issues to the implementation of curriculum, assessment literacy, numeracy support, and innovative instruction shows a proactive and strategic approach towards the development of teachers. The benefits of such efforts extend beyond enhancing teacher performance to improving instructional methods and learning outcomes for learners, thus contributing to the goal of providing quality, inclusive, and relevant basic education. The findings agree with Christensen and Jerrim (2025), who found that participation in professional learning communities was positively related to important teacher outcomes across different educational contexts.

Problem 2. What is the extent of implementation of Learning Action Cell sessions at Bit-os Elementary School in terms of the following LAC characteristics: topics discussed, participants involved, pedagogical approaches used, and enrichment of content and professional learning focus?

Table 5. Extent of LAC Implementation in Terms of Topics Discussed (n = 16)

Indicators	Mean	Verbal Description	Verbal Interpretation
1. Topics on curriculum implementation were discussed in LAC sessions	4.56	Consistently Demonstrated	Highly Evident
2. Instructional strategies for improving teaching were addressed in LAC sessions	4.63	Consistently Demonstrated	Highly Evident
3. Learner assessment and evaluation were included in LAC discussions	4.69	Consistently Demonstrated	Highly Evident
4. Classroom management concerns were tackled in LAC sessions	4.63	Consistently Demonstrated	Highly Evident
5. Current educational issues and priorities were highlighted in LAC sessions	4.63	Consistently Demonstrated	Highly Evident
General Mean	4.63	Consistently Demonstrated	Highly Evident

Legend: 4.50–5.00 = Highly Evident, 3.50–4.49 = Evident, 2.50–3.49 = Moderately Evident, 1.50–2.49 = Slightly Evident, 1.00–1.49 = Not Evident

Implementation of the topics in the Learning Action Cell (LAC) sessions in terms of the evaluation

ratings given by the teachers for every LAC session. From the records, there was a general mean of 4.63, which means highly evident. This indicates that the topics discussed were implemented and are very relevant to the professional learning needs of teachers.

Of the different indicators, it was found out that the topic Learner Assessment and Evaluation got the highest mean of 4.69. From this result, it can be seen that there is an emphasis on assessment in this school. Documentation of records showed that topics like the results of Phil-IRI, RMA, intervention, and learner performance are always discussed during the LAC sessions.

Instructional Strategies, Classroom Management, and Current Educational Issues were found to have a mean of 4.63, signifying that teachers continuously profited from deliberations regarding matters relevant to the classroom practice. The LAC logs contained numerous discussions on differentiated instruction, ways to improve literacy and numeracy, techniques to engage the learners, intervention planning, and implementation of MATATAG Curriculum among others. Such topics gave teachers ideas on how to apply what they learned in class.

The third topic to be assessed was Curriculum Implementation, having a mean of 4.56, which was also highly evident. From the session logs, teachers were found to discuss learning competencies, instructional planning, and education reforms among others.

These findings imply that the topics deliberated were in response to real classroom conditions. The choice of the topics was not just because of compliance but rather due to the need to address priority issues based on monitoring and assessment data. This finding agrees with the assertions of Sims and Fletcher-Wood (2021) and Richit (2021) that professional development works best when it is relevant, practical, and linked with classroom practice and learner outcomes. It is also consistent with Floreno (2021) on the importance of sustaining and managing school-based LAC sessions to address teaching-and-learning challenges.

In summary, the results show that the topics deliberated during LAC sessions indeed helped in the enhancement of teaching and continuous professional learning in Bit-os Elementary School.

Table 6. Extent of LAC Implementation in Terms of Participants Involved

Indicators	Mean	Verbal Description	Verbal Interpretation
1. Teachers attended LAC sessions conducted in the school	4.75	Consistently Demonstrated	Highly Evident
2. School leaders actively participated and provided support during LAC sessions	4.69	Consistently Demonstrated	Highly Evident
3. Master Teachers and designated coordinators regularly facilitated LAC activities	4.69	Consistently Demonstrated	Highly Evident
4. Early grade teachers (ELLN/DAP focus) engaged in LAC outputs and action plans	4.69	Consistently Demonstrated	Highly Evident
5. Resource persons from district/division contributed expertise during sessions	4.69	Consistently Demonstrated	Highly Evident
General Mean	4.70	Consistently Demonstrated	Highly Evident

Legend: 4.50–5.00 = Highly Evident, 3.50–4.49 = Evident, 2.50–3.49 = Moderately Evident, 1.50–2.49 = Slightly Evident, 1.00–1.49 = Not Evident

Table 6 shows the extent of LAC sessions in terms of participants involved.

Implementation of LAC Sessions in terms of participation in the implementation in terms of participants, according to the teacher participants. Results showed a generally high mean of 4.70, meaning highly evident, which means high participation through the whole duration of the implementation. It signifies that participation in LAC sessions is a core component of the professional learning culture of Bit-os Elementary

School.

Among the indicators, Regularly Attends LAC Sessions was given the highest mean of 4.75. Monitoring and attendance logs showed that teachers were always present and participated in LAC sessions. Conducting regular LAC sessions focusing on instructional problems, learner performance problems, and initiatives of the Department of Education helped maintain teacher participation and dedication.

On the other hand, the Indicators Actively Participates in Discussion, Shows Interest in the Topics Discussed, and Remains Engaged and Attentive During Sessions were also rated highly. Session reports and reflection journals indicated that there were frequent discussions on Phil-IRI results, literacy and numeracy interventions, learner assessment results, classroom management issues, and MATATAG Curriculum implementation. Such discussions facilitated the exchange of experiences, problem solving, and the formulation of suitable instructional interventions to meet the needs of the learners.

On the other hand, the Indicator Completes Required Activities and Outputs, which was rated 4.69, is another indicator that showed a highly visible level of participation. Outputs from professional learning showed that teachers were able to complete intervention plans, instructional materials, and other tasks required in LAC.

The high scores in all areas indicate that the involvement of teachers was not only based on their attendance but also on their engagement in professional learning programs. The consistent conducting of LAC sessions, the strong support of the school head, and the active facilitation of Master Teachers ensured the institutionalization of LAC as a means of professional development for schools. This result is consistent with the findings of Elkomy and Elkhail (2022), Ohayon and Albulescu (2023), Tengku Ariffin et al. (2024), Ho et al. (2025), Elfarargy et al. (2022), and Voelkel et al. (2023) regarding the importance of collective participation, collaborative dialogue, shared leadership, instructional coaching, and active engagement in professional learning communities.

On the whole, the active involvement of teachers and school administrators made a significant contribution to the successful conducting of Learning Action Cell sessions in Bit-os Elementary School.

Table 7. Extent of Implementation of LAC sessions in terms of Pedagogical Approaches Used

Indicators	Mean	Verbal Description	Verbal Interpretation
1. Collaborative learning strategies were applied in LAC sessions	4.63	Consistently Demonstrated	Highly Evident
2. Reflective practice was regularly integrated into LAC discussions	4.56	Consistently Demonstrated	Highly Evident
3. Inquiry-based approaches were utilized in LAC activities	4.63	Consistently Demonstrated	Highly Evident
4. Peer coaching and mentoring were practiced during LAC sessions	4.69	Consistently Demonstrated	Highly Evident
5. Problem-solving and case analysis were employed in LAC sessions	4.63	Consistently Demonstrated	Highly Evident
General Mean	4.63	Consistently Demonstrated	Highly Evident

Legend: 4.50–5.00 = Highly Evident, 3.50–4.49 = Evident, 2.50–3.49 = Moderately Evident, 1.50–2.49 = Slightly Evident, 1.00–1.49 = Not Evident

The degree of integration of LAC sessions based on the pedagogical approaches utilized as evidenced by the teachers' evaluation scores yielded a general mean score of 4.63, which was described as Highly Evident, showing that different learner-centered and collaborative pedagogical approaches were generally implemented in LAC sessions at Bit-os Elementary School. It is seen from the findings that the professional learning activities were conducted to enable the teachers to be engaged in collaborative inquiry, reflective practice, coaching and mentoring, and problem-solving discussions which contribute to the improvement of instructions.

Peer Coaching and Mentoring emerged as the indicator with the highest mean score of 4.69, which was described as Highly Evident. From the result, it can be seen that the school has developed a strong collaborative culture. Therefore, teachers in BES were involved in lessons sharing sessions, coaching sessions, collaborative analysis of learner performance, and classroom problem discussion. The Master Teachers continuously mentor and give technical assistance.

The rating given to the indicators on Collaborative Learning, Inquiry-Based Learning, and Problem-Solving and Case Analysis is equally high, thus, implying that these strategies were used during the LAC sessions. Session guides, meeting minutes, and accomplishment reports indicated that the teachers engaged in group discussions, experience sharing, collaborative planning, analysis of learners' data, and discussion of classroom-related issues. Through such processes, the teachers were able to work together in examining issues related to instruction, formulating intervention strategies, and coming up with practical solutions to problems that arise in classroom instructions. The use of these approaches clearly indicates that LAC sessions provide the needed platform for collaborative learning and professional dialogue.

On the other hand, the strategy of Reflective Practice with a mean of 4.56 was also rated Highly Evident. The reflection journals, coaching records, and session outputs indicated that the teachers engaged in reflecting on their teaching experiences, evaluation of instructional strategies used, and identification of weaknesses. Through such processes, the teachers were able to examine their practices and make decisions to improve on teaching and learning processes.

It is evident that professional learning was not only about sharing information, but also allowed teachers to reflect on problems, collaborate, and solve problems together.

This finding corroborates Ajani (2023), who emphasized the significance of experiential activities, collaboration, feedback, and reflection in applying professional learning to classroom practice. It also relates to the social-constructivist perspective discussed by Murphy and Martin (2024), in which professional learning develops through interaction, shared experiences, and engagement with other people and the learning environment.

Thus, it can be stated that the application of collaborative and reflective pedagogical approaches helped enhance professional learning and instruction in the school Bit-os Elementary School.

Table 8. *Extent of LAC Implementation in Terms of Enrichment of Content and Professional Learning Focus*

Indicators	Mean	Verbal Description	Verbal Interpretation
1. Literacy and numeracy competencies were enriched through LAC sessions	4.63	Consistently Demonstrated	Highly Evident
2. Curriculum alignment and updates were integrated into LAC discussions	4.56	Consistently Demonstrated	Highly Evident
3. Assessment literacy was strengthened through LAC activities	4.69	Consistently Demonstrated	Highly Evident
4. Learner welfare and child protection were emphasized in LAC sessions	4.63	Consistently Demonstrated	Highly Evident

5. Professional growth and continuous learning were prioritized in LAC sessions	4.69	Consistently Demonstrated	Highly Evident
General Mean	4.64	Consistently Demonstrated	Highly Evident

Legend: 4.50–5.00 = Highly Evident, 3.50–4.49 = Evident, 2.50–3.49 = Moderately Evident, 1.50–2.49 = Slightly Evident, 1.00–1.49 = Not Evident

The level of implementation of LAC sessions in terms of content enrichment and professional learning emphasis according to the teacher ratings in the evaluation. The LAC sessions adequately covered literacy and numeracy enhancement, curriculum coherence, assessment literacy, learner well-being, and professional development.

Assessment Literacy and Professional Development had the highest means of 4.69 among the indicators. Teachers appreciated the activities in which learner assessment, instructional decision making, reflection, and professional development were emphasized in LAC sessions. Evidence from the school revealed that LAC sessions were frequently held where teachers analyzed the Phil-IRI and RMA outcomes, implemented intervention measures, and reflected on their classroom practices.

Literacy and Numeracy Enhancement were also given a high rating, due to the school's consistent efforts in addressing issues on learners' performance. The discussions on reading, numeracy interventions, ELLN and DAP, remediation and assessment practices contributed to the enhancement of teachers' skills in fostering foundational learning. Likewise, Learner Welfare was rated highly, which showed that professional learning not only focused on instruction but also addressed child protection, mental health, positive discipline, inclusive education, and disaster preparedness.

On the other hand, the Curriculum Alignment, with an average of 4.56, was highly evident. Discussions on curriculum revisions, instructional plans, MATATAG Curriculum reform, among others, enabled teachers to align their classroom practices with current educational thrusts and policies.

The findings showed that the enrichment of content and professional learning focus was responsive to the teachers' and schools' needs. The inclusion of assessment literacy, foundational learning, welfare of the learners, and curriculum implementation highlights the responsiveness of the LAC sessions in continuously developing the capacity of the teachers in Bit-os Elementary School. The findings confirm the conclusions of de Jong et al. (2022), Patwardhan and Abrol (2023), Chiang et al. (2024), and Liu et al. (2025) regarding the importance of context-responsive collaboration, active and reflective learning, collective attention to teaching practice, and a shared focus on learner outcomes in professional learning communities.

Finally, it could be stated that the findings show that the implementation of Learning Action Cell sessions with regard to the enrichment of content and professional learning focus was highly apparent. The balance of the topics related to literacy and numeracy enhancement, assessment literacy, curriculum implementation, learner welfare, and professional development facilitated the development of responsive professional learning in Bit-os Elementary School.

Table 9. Summary of the Extent of Implementation of LAC sessions

Indicators	Mean	Verbal Description	Verbal Interpretation
Topics Discussed	4.63	Consistently Demonstrated	Highly Evident
Participants Involved	4.70	Consistently Demonstrated	Highly Evident
Pedagogical Approaches	4.63	Consistently Demonstrated	Highly Evident
Enrichment of Content and Professional Learning Focus	4.64	Demonstrated	Highly Evident

Overall Mean	4.65	Consistently Demonstrated	Highly Evident
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Legend: 4.50–5.00 = Highly Evident, 3.50–4.49 = Evident, 2.50–3.49 = Moderately Evident, 1.50–2.49 = Slightly Evident, 1.00–1.49 = Not Evident

The data showed an overall mean score of 4.65 (Highly Evident), which suggests that Learning Action Cells were always well-structured and effectively executed in all the dimensions being considered. The participants involved scored the highest mean (4.70), next came the enrichment of content (4.64), while topics covered and pedagogical techniques scored the same mean of 4.63.

It can be seen from the consistently high mean scores in all dimensions that there was effective and systematic execution of Learning Action Cells. Teachers felt the need, importance, and relevance of such sessions that facilitated teaching and learning as well as professional development of teachers. This is further supported by the fact that professional learning activities were incorporated into the improvement process of the school.

Similarly, the highly evident mean score for participants involved is an indication of the active involvement of teachers, school head, Master Teachers, and resource persons. Through such collaboration, a professional learning culture was established in the school.

In the same way, the high rating obtained in the use of pedagogical strategies indicates the continuous incorporation of collaborative learning, reflective practices, coaching among peers, inquiry-based learning, and problem-solving strategies. Through the use of such pedagogical strategies, teachers were able to look at instructional problems, share best practices, and create relevant solutions to the instructional problems faced.

The highly evident rating of enrichment in content and professional learning focus reflects the school's concentration in improving literacy and numeracy, assessment literacy, curricular alignment, learner well-being, and professional development.

The high ratings across all dimensions signify that the LAC program at the Bit-os Elementary School was comprehensive and responsive to not only school needs but also teachers' professional learning needs. The discussions and deliberations held during the sessions were centered on real problems and challenges encountered by the learners, curriculum changes, and teaching in the classroom making LAC a vital part of the school's continuous improvement process. This finding validates the conclusions of D'Angelo et al. (2022), Eborde and Escote (2024), and OECD (2025) regarding the importance of collaborative, adequately supported, and sustained professional learning for improving teacher practice. Furthermore, this finding affirms Bajar et al. (2021) and Tomogon and Lactam (2024), who recognize LAC as a collaborative, school-based professional development program for enhancing teachers' instructional competence.

Collectively, the findings provide clear evidence that the Learning Action Cell program provided an effective forum for professional growth and instructional improvement. The highly evident ratings across all dimensions provide clear validation of the institutionalization of collaborative professional learning at Bit-os Elementary School.

Problem 3. What evidence of teacher professional growth can be identified from the implementation of the LAC sessions?

Table 10. *Evidence of Teacher Professional Growth from LAC Implementation*

Domain / Area of Growth	Objectives Achieved	Indicators Identified	Documentary Evidence / Source	Evidence Captured
Content Knowledge	Strengthening foundational subject	Improved mastery of literacy and	Teacher Evaluation Forms, Reflection	Evaluation forms recorded a mean of 4.65 , confirming

Enhancement	knowledge	numeracy concepts	Journals, Session Outputs, ELLN/DAP Modules, RMA Results	improved mastery; reflection notes validated deeper understanding of literacy/numeracy
Pedagogical Development / Skills	Enhancing teaching strategies responsive to learner diversity	Application of differentiated instruction, inclusive practices, ICT integration	Lesson Plans, Classroom Observation Tool reports, Demonstration Teaching, LAC Reports	Observation tool results and evaluation forms (mean 4.70) confirmed varied strategies; demonstration teaching highlighted ICT integration
Assessment Literacy / Practices	Strengthening evidence-based teaching and learner progress monitoring	Use of Phil-IRI, formative assessments, data-driven instruction	Assessment Tools Developed, CRLA Reports, Teacher Evaluation Forms, Assessment Outputs	Evaluation forms showed a mean of 4.63 , reflecting stronger assessment use; outputs documented systematic formative practices
Classroom Management	Fostering positive learning environments and teamwork	Collaborative learning, peer mentoring, enhanced routines	Classroom Observation Tool notes, Coaching Records, Demonstration Teaching	Observation tool results validated improved routines; evaluation forms (mean 4.60) confirmed effective peer mentoring
ICT Integration / Innovative Strategies	Promoting innovation and adaptability in instruction	Adoption of ICT tools, digital resources, creative lesson designs	ICT-integrated Lesson Plans, SLAC Portfolios, Workshop Outputs	Evaluation forms recorded the highest mean of 4.75 , confirming ICT adoption; portfolios evidenced integration of digital lesson plans
Collaborative Professional Learning	Strengthening peer collaboration and collective learning	Participation in professional discussions and peer sharing	Minutes of Meetings, Attendance Sheets, Reflection Notes	Attendance sheets showed active participation; evaluation forms (mean 4.68) highlighted peer sharing and collaboration
Reflective Practice & Professional Growth	Institutionalizing reflective documentation and peer learning	Documentation of best practices, sharing of innovations, reflection journals	Reflection Journals, SLAC Portfolios, Certificates	Reflection journals captured self-assessment; evaluation forms (mean 4.40) indicated moderate practice compared to other domains
Research and Innovation	Encouraging creativity and problem-solving through research	Development of innovations and action research	Intervention Plans, Action Research Outputs, Demonstration Teaching	Action research outputs evidenced innovation; evaluation forms (mean 4.45) showed emerging but less frequent practice
Leadership Development	Building leadership capacity and mentoring skills	Facilitation of LAC sessions and mentoring activities	LAC Facilitation Records, Teacher Evaluation Forms	Evaluation forms (mean 4.70) confirmed leadership roles; facilitation records documented active mentoring

The indicators of teacher professional growth based on teacher evaluation forms, reflection journals, classroom observation reports, coaching and mentoring records, lesson plans, demonstration teaching products, instructional materials, and other means of verification (MOV). The results showed that there was a

strong presence of teacher professional growth in all areas, ICT Integration getting the highest mean score (4.75) compared with Pedagogical Development and Leadership Development (4.70).

Pedagogical development improvements were documented through classroom observation reports and demonstration teaching products, ICT integration improvements were confirmed by technology-enabled lesson plans, ICT-enhanced learning materials, and classroom observation records, while leadership development improvements were confirmed by records on LAC facilitation, mentoring tasks, committee membership, and involvement in school-based professional development activities. Based on these results, LAC sessions were indeed a source of improvement not only in instructional capabilities but also in leadership abilities of teachers.

Similarly, growth can be seen in content mastery, assessment, classroom management, and collaboration. The analysis of the reflection journals, intervention plans, and observation reports indicated that teachers have been able to make use of learner assessment results, come up with interventions, improve their classroom management, and collaborate with their peers to address issues with instruction. These developments show how the knowledge and skills acquired by teachers from constant participation in the activities of the Learning Action Cells are being used in practice.

On the other hand, Reflective Practice with a mean of 4.40 and Research and Innovation with a mean of 4.45 received relatively lower scores, yet still within the Highly Evident range. According to the reflection journals and professional development documents, teachers have been participating in reflective activities and professional sharing; yet, action research and innovation have not been reported to occur as often as other professional development activities.

Even though reflective practice and research and innovation were both very apparent, the relatively low scores imply the possibility of improvement in action research participation, innovation creation, and reflective documentation through future LAC initiatives.

This implies that the professional learning attained during LAC at Bit-os Elementary School was effectively converted to classroom teaching and professional performances. The results confirm the findings of Caballes (2023), Lugtu (2023), and Almonicar and Padasas (2022), who associated school-based LAC implementation with the development of teachers' competencies, professionalism, instructional practices, and professional performance.

In summary, the results from documentary analysis show that LAC implementation has contributed immensely to teacher professional development at Bit-os Elementary School.

Problem 4. What do the evaluation results of LAC sessions reveal about their effectiveness?

Table 11. Evaluation results of LAC sessions in Terms of Effectiveness

Evaluation Dimension	Findings / Results	Documentary Evidence	Evidence Captured (Session Evaluation Form Mean)
Relevance of Topics	Topics on literacy, numeracy, assessment literacy, and learner welfare rated highly relevant	Session Evaluation Forms, Attendance Sheets	Session Evaluation Forms accomplished after each session recorded a mean of 4.65, confirming strong relevance to DepEd priorities and MATATAG curriculum
Effectiveness of Facilitation	Sessions were well-organized, engaging, and participatory	Classroom Observation Tool, Monitoring Reports	Session Evaluation Forms (mean 4.70) and observation notes validated systematic planning, active participation, and clarity of objectives
Usefulness to Teaching Practice	Teachers applied strategies from ELLN/DAP, Phil-IRI, and RMA in classrooms	Lesson Plans, Reflection Journals	Session Evaluation Forms (mean 4.63) confirmed usefulness; reflection journals and lesson plans documented integration of

			modules into practice
Overall Satisfaction	Teachers expressed strong satisfaction with LAC sessions	Evaluation Surveys, Feedback Forms	Session Evaluation Forms (mean 4.68) showed high satisfaction; feedback forms highlighted supportive environment and collaboration
Monitoring & Documentation	Evidence of portfolios, certificates, and reports	SLAC Portfolios, Year-End Reports	Session Evaluation Forms and documentation outputs validated teacher growth; portfolios confirmed consistent monitoring (mean 4.60)
Leadership & Mentoring	Teachers recognized mentoring and coaching roles	Coaching Logs, Facilitation Records	Session Evaluation Forms (mean 4.70) highlighted leadership and mentoring roles; facilitation records documented instructional guidance

Evaluations done on the Learning Action Cell sessions were done using the teachers' evaluation scores, journals, feedback forms, monitoring reports, and other related materials. Both quantifiable and non-quantifiable data regarding the quality, relevance, and significance of professional learning activities undertaken at the school were gotten from these sources.

Positive evaluation results were always consistent in all evaluation dimensions, giving a mean score of 4.60 to 4.70. This shows that teachers perceived the session to be very relevant, well-conducted, and helpful to their professional lives. Responses also reveal that LAC sessions have been addressing teachers' instructional concerns and encouraging collaboration and professional development among them.

In terms of indicators, Effectiveness of Facilitation and Leadership Support achieved the highest mean score of 4.70, which was perceived as Highly Evident. Documentations based on monitoring reports, facilitation logs, minutes of meetings, and accomplishment reports confirmed that Master Teachers, LAC leaders, and the school head effectively assisted discussions, rendered technical assistance, facilitated cooperative activities, and ensured session topic alignment to the priorities of the school and Department of Education. It could be inferred that the high scores were indicative of effective facilitation and instructional leadership as key determinants of successful LAC sessions.

Relevance of discussion topics and usefulness of activities of LAC to classroom instruction also scored high. Reflection journals, lesson plans, intervention plans, and instructional materials confirmed that teachers successfully utilized knowledge acquired through sessions on literacy and numeracy development, assessment literacy, ELLN, DAP, Phil-IRI use, RMA interpretation, curriculum implementation, and learner welfare.

Similarly, the variable Overall Satisfaction received a mean score of 4.68, reflecting favorable perception on the part of teachers regarding the value and worth of the Learning Action Cell program. The reflection journals and feedback forms of the teachers showed appreciation of the collaborative environment, professional sharing and relevance of the session topics to their teaching duties. The high ratings suggest that the participants perceived the LAC sessions as valuable and worthwhile professional development activities.

On the other hand, Monitoring and Documentation received a mean of 4.60 and was considered Highly Evident. Documentary proof including attendance sheets, session guides, accomplishment reports, coaching logs, portfolio, certificate and annual report showed that LAC activities were well documented and monitored.

From the findings, it is evident that not only from positive evaluation reports from teachers but also through evidence of professional practices in the classroom and monitoring was the effectiveness of the Learning Action Cells strengthened. Triangulating evaluation ratings with professional learning products, reflective journals, and monitoring records has increased the validity of the findings because the positive findings were backed up by professional practices.

The findings are supported by Pobre (2022), who emphasized the value of systematically evaluating LAC implementation through participants' experiences, program processes, and evidence of professional practice. Furthermore, effective leadership, collaborative engagement, and organizational support have been identified as important conditions for strengthening professional learning communities and improving teachers' professional practices (Ninković et al., 2022).

Conclusively, the evaluation results show the success of Learning Action Cell in providing effective professional development in school settings. The high scores in the facilitation, support from leaders, relevance of content, and relevance of the material in classrooms show that the program offered a worthwhile learning experience for teachers.

Problem 5. What strengths and challenges are evident in the implementation of LAC sessions at Bit-os Elementary School, based on documentary evidence and teacher reflections?

Table 12. *Strengths Evident in the Implementation of LAC Sessions*

Theme	Subtheme	Strengths Evident	Indicators	Interpretation	Implications
Relevance of Topics	Curriculum Alignment	Topics aligned with literacy, numeracy, assessment, learner welfare	Consistent session outputs	Responsive to MATATAG reforms	Reinforces foundational learning goals
Pedagogical Development	Instructional Strategies	Improved teaching methods and differentiated approaches	Lesson exemplars, observation notes	Shows growth in pedagogy	Supports differentiated instruction
Assessment Practices	Formative & Diagnostic Tools	Strengthened use of Phil-IRI, RMA	Documented assessment records	Data-driven teaching	Enhance learner progress monitoring
Classroom Management	Peer Mentoring	Collaborative learning and mentoring among teachers	Coaching records	Builds collegiality	Sustains classroom routines
ICT Integration	Digital Adoption	Development of instructional materials and use of digital tools	Digital lesson outputs	Innovation in pedagogy	Promotes technology-driven learning
Collaborative Learning	Knowledge Sharing	Strong peer collaboration and exchange of practices	Meeting minutes	Inclusive professional dialogue	Strengthens collective practice
Reflective Practice	Documentation	Recording of best practices and innovations	Reflection journals	Systematic reflection	Builds professional portfolios
Research and Innovation	Interventions & Action Research	Implementation of reading/math interventions and research projects	Research outputs	Teacher inquiry evident	Supports evidence-based practice
Leadership and Facilitation	Mentoring	Active facilitation and guidance by team leaders	Coaching logs	Strong leadership role	Sustains mentoring culture

Table 13 highlights the strengths observed in the conduct of Learning Action Cell (LAC) sessions at

Bit-os Elementary School. The noted strengths are gathered from teachers' evaluation ratings and reflection journals showing evidence of positive impact and good practices coming from LAC activities.

To confirm the credibility of the findings, the noted strengths from the evaluation results were validated by teachers' reflections and selected professional learning products. This validation process ensured that the noted strengths were not only perceived but also practiced by the teachers.

According to the records, one of the main strengths observed in LAC implementation was the high relevance of topics to the curricular priorities, needs of the learners, and Department of Education projects. Topics related to literacy and numeracy development, assessment literacy, curriculum implementation, welfare of the learners, and innovation in instruction allowed teachers to resolve their classroom problems and enhance instructional delivery.

Another strength is the enhancement in teaching practices. The teacher indicated that through LAC sessions, there were more chances to learn and apply appropriate instructional techniques, exchange experiences, and solve teaching problems collectively. Furthermore, from reflection journals, it was evident that differentiated teaching, assessment-based teaching, and learner-based teaching approaches had been implemented. This means that the professional learning process was converted to classroom practice.

The ICT integration is another strength that was identified from the research findings. There were more teachers who used digital teaching materials and resources for instruction. This shows that the school was trying to innovate and adopt new demands in the teaching-learning process.

The other strength is collaboration among teachers. Through the LAC sessions, teachers were able to engage in professional discussions, mentoring, sharing of best practices, and solving problems collectively.

These findings are supported by Francisco (2022), who emphasized that Learning Action Cell sessions provide opportunities for teachers to collaboratively address instructional concerns and strengthen their teaching practices. Similarly, the OECD (2023) highlighted the importance of professional learning that is relevant to teachers' responsibilities, sustained through collaboration, and connected to classroom practice. The findings also conform to the Department of Education's (2021) emphasis on aligning professional development activities with teachers' professional needs and improvements in teaching and learning.

In summary, the identified strengths clearly show that the Learning Action Cell program implemented at Bit-os Elementary School was done collaboratively, relevantly, and responsively. The connection between the professional learning activities and school priorities, the improvement in teaching practices, the use of ICT, and the culture of collaboration are all elements that ensured the continued professional development of teachers and their improvement as instructors.

Table 13. *Challenges evident in the Implementation of LAC sessions*

Theme	Subtheme	Challenges Encountered	Indicators	Interpretation	Implications
Relevance of Topics	Emerging Issues	Limited coverage of ICT ethics and inclusive education	Feedback notes	Gaps in coverage	Requires expansion of topics
Pedagogical Development	Time Constraints	Difficulty applying new strategies consistently	Reflection journals	Gap between training and practice	Needs structured follow-up
Assessment Practices	Workload Pressure	Challenges in sustaining data-driven instruction	Monitoring reports	Burden on teachers	Calls for systemic support
Classroom Management	Resource Limitations	Large class sizes and lack of materials	Teacher accounts	Resource inequity	Requires allocation of resources

ICT Integration	Access Issues	Limited devices and unstable internet connectivity	Session feedback	Digital divide	Needs infrastructure support
Collaborative Learning	Uneven Participation	Unequal involvement of teachers in discussions	Reflection journals	Limited inclusivity	Requires equitable participation
Reflective Practice	Inconsistency	Irregular reflection and documentation practices	Teacher feedback	Weak reflection culture	Needs systematic documentation
Research and Innovation	Mentoring Gaps	Limited support for research design and writing	Teacher reflections	Weak inquiry support	Requires mentoring programs
Leadership and Facilitation	Role Balance	Difficulty balancing leadership with administrative workload	Leader reflections	Leadership strain	Needs distributed leadership

Table 13 shows the difficulties faced during the execution of the Learning Action Cell (LAC) sessions in Bit-os Elementary School. The challenges noted were those which came about from teachers' rating of their performance in evaluating their experiences, reflection journals and professional development documents, which gave concrete evidence of the difficulties faced during the conduct and application of LAC sessions. Although these challenges did not have a great impact on the success of the whole program, they are issues which need constant attention.

In order to establish the credibility of the research findings, the challenges identified through the evaluation ratings were validated through the reflection of teachers' experience during the conduct of LAC sessions. Through this validation process, it was established that the problems noted were consistently observed in different professional learning activities.

One of the main challenges that emerged was the lack of adequate discussion of contemporary issues in education like information and communication technology ethics, digital citizenship and inclusive education. Although the LAC sessions covered many important issues like literacy, numeracy, assessment literacy, implementation of the curriculum and learner welfare, there was a need for more learning in relation to modern issues in education.

Time limitations were also mentioned by the teachers as a barrier in implementing new learning strategies and interventions in the classroom. The conflicting demands of teaching, assessment, school programs, and other administrative functions sometimes made it difficult for the teachers to implement the innovations introduced through LAC sessions. Likewise, workload considerations impeded the consistent conduct of reflective documentation and follow-up actions after each session.

Resource limitations became a repeated issue. Teachers experienced difficulties because of the lack of instructional resources, technology, and Internet access required for professional learning activities and classroom applications. At times, this became an impediment to the complete implementation of ICT-based innovations.

Uneven participation and documentation were also among the challenges. While participation and engagement in the sessions were relatively high, there were instances wherein some teachers had varying levels of participation in discussions and best practices, as well as in completing the learning outputs. Moreover, the reflection journals showed that consistent documentation and reflection still needed to be improved.

However, despite these difficulties, there were measures put in place by Bit-os Elementary School to cope and mitigate their effects on LAC implementation. To cope with time limitation and work load problem, the school had institutionalized the conduct of LAC meetings, and professional development of the teachers

were done by including such activities in the School Professional Development Plan. Coaching and mentoring from the Master Teachers and the school head were done to help teachers use the new strategies or interventions that they had acquired. With regard to the resource limitation, the teachers were told to make full use of digital and print materials, as well as sharing their instructional materials and utilizing the local technology while conducting the professional learning activities.

In addition to that, other issues such as ICT integration, inclusive education, welfare of the learners, and curriculum updating were gradually included in the subsequent LAC sessions to make sure that the professional learning was always aligned with the current needs of the teachers.

The findings are consistent with the qualitative study published by IJISRT (2024), which identified limited time and heavy workloads as continuing difficulties experienced by teachers during LAC implementation. Nguyen (2024) similarly emphasized that collaborative professional learning becomes more effective when it is systematically organized and aligned with school-improvement priorities. Moreover, the Department of Education–Schools Division Office of Butuan City (2025) underscored the importance of conducting regular LAC sessions and maintaining appropriate documentation to support the continuous implementation and monitoring of school-based professional learning.

All in all, the findings suggest that even though Learning Action Cells sessions were successfully conducted at Bit-os Elementary School, there were some challenges concerning time management, resources availability, participation, documentation, and emergence of new issues to be included. However, the proactive measures taken by the school in terms of more intensive coaching and mentoring, monitoring, sharing of resources, systematic documentation, and professional learning activities helped deal with these challenges.

Problem 6. Based on the mapping results, what enhancement plan can be proposed to strengthen the professional development strategies of teachers through LAC sessions?

Table 14. *Proposed Professional Development Enhancement Plan*

Key Result Area	Activities/ Strategies	Persons Responsible	Timeline	Success Indicators
Strengthen Teacher Participation	Establish protected LAC schedules and minimize schedule conflicts	School Head, LAC Coordinator	Whole School Year	95–100% attendance rate
Improve Relevance of Topics	Conduct annual Learning and Development Needs Assessment (LDNA)	School Head, Teachers	Beginning of School Year	LAC topics aligned with teacher needs
Enhance Collaborative Learning	Institutionalize lesson sharing, peer coaching, and mentoring sessions	School Head, Master Teachers	Quarterly	Increased collaborative activities
Improve Classroom Application	Conduct post-LAC classroom observations and coaching sessions	School Head, Master Teachers	Quarterly	Evidence of classroom implementation
Strengthen Monitoring and Evaluation	Develop a standardized LAC Monitoring and Evaluation Tool	School Head, LAC Team Leader	Every LAC Cycle	Monitoring reports completed
Improve Documentation	Maintain digital and physical LAC portfolios	LAC Coordinator	Monthly	Complete and updated documentation
Support Instructional Innovation	Encourage development and sharing of instructional materials and best practices	Teachers, Master Teachers	Quarterly	Increased instructional outputs
Sustain Professional Growth	Encourage participation in action research and innovation projects	School Head, Research Coordinator	Annually	Increased teacher research outputs

Professional Development Enhancement Plan was formulated based on the results obtained from the study conducted. This plan specifies specific interventions that can be applied to enhance the implementation of the LAC program.

This plan provides guidance on how to develop the professional development of teachers and ensure continuous school improvement.

The formulation of the enhancement plan will result in the improvement of the implementation of the LAC program in Bit-os Elementary School. The participation and involvement of teachers in the activities of LAC will be improved. Moreover, the professional development activities will be more pertinent to teachers' instructional needs and the priorities of the school.

It is anticipated that the enhancement plan would result in positive changes in teaching methodology, the collaborative spirit among the teachers, and coaching and mentoring in the school as well. This plan would contribute towards proper documentation of LAC achievements as well as fostering innovation and research-based action.

Eventually, the implementation of this enhancement plan would help in improving professional competence among the teachers.

Conclusions

From the results of the study, the following conclusions were made:

1. Bit-os Elementary School's Learning Action Cell (LAC) has become a consistent and responsive professional development approach in the school setting. With the increase in professional development activities, variety of learning areas, engagement of the different stakeholders, and pedagogical strategies used, it becomes clear that LAC implementation has successfully fulfilled the needs of the professional learning of teachers as well as contributed to the goals of school improvement and Department of Education objectives.

2. The clear realization of the implementation of Learning Action Cell sessions based on the topics covered, participants, teaching strategies used, and enhancement of the subject matter and professional development is a reflection of the success of the school in establishing a culture of collaborative and continuous professional learning. The regular holding of the LAC sessions improved the level of professional involvement of the teachers and created a culture of collaborative and reflective practice.

3. The evidence of professional growth reflects the positive contribution of Learning Action Cell sessions in improving the teachers' instructional competence, assessment competence, classroom management, leadership skills, collaboration, and ICT utilization. The utilization of the knowledge and skills gained from the sessions in the classroom practice is a proof of the capability of the LAC sessions in fostering professional growth and instruction. Nonetheless, the findings imply the importance of improving teachers' involvement in reflective and research activities for continuous professional learning and instruction.

4. The highly positive ratings of the Learning Action Cells session indicate that teachers considered the program relevant, useful, facilitated properly, and in line with their professional learning needs. Good facilitation, leadership participation, and proper monitoring made the quality and effectiveness of the professional learning experience more effective.

5. The positive aspects associated with the implementation of the Learning Action Cells session, including good collaboration, participation, facilitation, ICT integration, and relevance of professional learning to instructional needs, have helped in making the implementation of the program a success. However, at the same time, there were some challenges with respect to time constraints, workload, lack of resources, documentation, and educational issues that need to be addressed through continuous support and strategic intervention.

6. The suggested Professional Development Enhancement Plan acts as an evidence-based approach towards enhancing the Learning Action Cell strategy and ensuring teacher professional development. Whereas it can be said that there is professional development in all areas, there are still areas where there is potential for further development in reflective practices, research on instruction, and innovation in the classroom.

Recommendations

Based on the results and conclusions drawn from the study, the following recommendations may be made:

Educational Leaders. Educational leaders and policymakers can improve support mechanisms for implementing Learning Action Cell through the promotion of sustainable professional learning communities, mentoring, instructional innovation, and relevant professional development programs.

Schools Division Office. The Schools Division Office may employ the results of the study in improving the school-based professional development programs of teachers and school leaders through technical assistance, monitoring, resource augmentation and capability building.

School Heads. School heads may assist in carrying out action research, innovation and reflective practice through the provision of time, resources, mentoring and technical assistance for instructional improvement and school development.

LAC Leaders and Master Teachers. LAC Leaders and Master Teachers may enhance the reflective practice and action research of the teachers through mentoring, technical assistance, and collaboration with the teachers in order to write down their reflections, create classroom innovations and carry out action research in relation to instructional issues and learner needs.

Bit-os Elementary School. The Bit-os Elementary School can implement the above recommended Professional Development Enhancement Plan for improving mentoring, coaching, reflection, action research, and instructional innovation.

Teachers. Teachers may be encouraged to undertake classroom-based research and innovation which may provide evidence-based answers to instructional and learning needs, thus developing their professionalism, instruction delivery and learner achievement.

Future Researchers. Future researchers may conduct further studies in other educational environments to verify the results of the present study and investigate the impact of implementing Learning Action Cell on reflective practice, participation in action research, instructional innovation, teacher performance, and learner outcomes.

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