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Context of Learning Action Cell Implementation in a Philippine public school district: Implications for professional practice and policy

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Abstract

The Learning Action Cell (LAC) is the Department of Education's school-based continuing professional development mechanism for teachers in the Philippines. Although the policy framework for LAC implementation is well established, less is known about how its major operational components are enacted at the district level and how teacher characteristics relate to implementation. This study examined the context and level of LAC implementation among 151 public elementary school teachers in Santa Cruz District, Ilocos Sur. A descriptive-correlational survey design was used. The instrument assessed ten implementation domains: assessment of needs, prioritization of topics, formulation of LAC groups, identification of appropriate interventions, identification of learning needs, scheduling of meetings, assignment of work, general feedback, preparation of the line-item budget, and writing of the LAC plan. Descriptive statistics and association tests were used to summarize respondent characteristics and examine relationships between profile variables and implementation domains. Results showed a predominantly female (88.1%), married (82.8%), and experienced workforce, with 73.5% reporting more than 10 years of service. All ten implementation domains were rated very highly implemented, with an overall mean of 4.46 on a five-point scale. Assignment of work received the highest mean (4.50), followed by line-item budgeting (4.49) and general feedback (4.48), whereas assessment of needs and prioritization of topics had the lowest, though still very high, means (4.44 each). Most demographic variables were not significantly related to implementation. Length of service showed small negative relationships with identification of appropriate learning needs and scheduling of meetings. The findings suggest that LAC implementation in the district is operationally strong but could be improved by strengthening needs diagnostics, topic prioritization, flexible scheduling, individualized professional learning, and systematic monitoring. A policy-oriented framework is proposed to support more responsive, data-informed, flexible, and sustainable LAC practice.

Keywords: Learning Action Cell, teacher professional development, professional learning community, school-based professional development, educational leadership, Philippines

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1. Introduction

Teacher professional development has increasingly shifted from episodic, externally delivered training toward sustained, job-embedded, and collaborative forms of professional learning. This change reflects a broader recognition that instructional improvement is rarely produced by isolated workshops alone. Teachers develop professional knowledge through repeated opportunities to examine classroom problems, interpret evidence, test strategies, discuss results with colleagues, and refine practice over time. In this sense, professional learning is most powerful when it is situated in the work teachers actually do and when schools create structures that support collective responsibility for teaching and learning (Desimone, 2009; Vescio et al., 2008).

In the Philippines, the Learning Action Cell (LAC) provides a formal school-based mechanism for this form of continuing professional development. Department of Education (DepEd) Order No. 35, s. 2016 institutionalized the LAC as a K to 12 school-based continuing professional development strategy intended to strengthen teachers' knowledge, skills, attitudes, and instructional practices. The policy positions teachers not simply as recipients of training but as members of a professional learning community who identify common concerns, share expertise, examine evidence, develop interventions, and review the effects of those interventions on learners (Department of Education, 2016). LAC therefore links professional development with the everyday instructional responsibilities of schools.

The importance of this mechanism is closely related to the demands of curriculum implementation. The K to 12 reform introduced changes in curriculum content, pedagogy, assessment, inclusion, contextualization, and the use of information and communication technology. Such changes require teachers to continuously update professional knowledge and coordinate instructional responses. A school-based structure is particularly relevant because national policies must ultimately be translated into decisions about actual learners, classrooms, schedules, materials, assessment results, and local community conditions. LAC sessions provide a venue for teachers to discuss these matters collectively rather than addressing them in isolation.

The collaborative character of LAC also responds to long-standing concerns about traditional professional development. Desimone (2009) argued that research on teacher development must pay attention to features such as content focus, active learning, coherence, duration, and collective participation. These features are difficult to achieve when professional development is limited to one-off seminars. By contrast, professional learning communities can create repeated cycles of discussion and application, making it possible for teachers to connect new ideas with classroom evidence and shared problems. Reviews of professional learning communities have similarly suggested that sustained collaboration can influence teaching practice and, under supportive conditions, contribute to student learning (Vescio et al., 2008). In the Philippine setting, studies of LAC and School Learning Action Cell implementation have reported benefits related to professional learning, collaboration, instructional problem solving, and teacher development (Bajar et al., 2021; Culajara, 2023; Silva, 2021). However, a policy mandate does not guarantee strong implementation. School-based professional development is affected by leadership, time, resources, teacher participation, the relevance of topics, facilitation quality, and the extent to which activities are followed by classroom application and feedback. Even when schools regularly conduct LAC sessions, the sessions may vary in their capacity to diagnose genuine needs, prioritize issues, organize groups, identify useful interventions, allocate responsibilities, schedule meetings, provide resources, monitor outcomes, and connect professional learning with school improvement. These operational details are important because they determine whether LAC becomes a meaningful professional learning process or merely a compliance activity.

The present study focuses on Santa Cruz District in Ilocos Sur. The district context is important because LAC

implementation occurs within a teaching workforce with particular demographic and professional characteristics. The original study involved 151 public elementary school teachers. Most respondents were women, most were married, and nearly three quarters had more than 10 years of service. Such a profile suggests a stable and experienced workforce, but it also raises practical questions about how professional development is scheduled, how veteran and less experienced teachers are grouped, and how individual learning needs are recognized within a collective structure. Context therefore matters not as a background description alone but as a possible influence on how teachers engage with school-based professional learning.

The study also responds to a practical policy need. DepEd Order No. 35, s. 2016 specifies a sequence of processes before, during, and after LAC sessions. Before a session, members identify professional development needs, prioritize topics, form LAC groups, determine appropriate interventions, set schedules, prepare resources, assign work, establish norms, prepare budgets, and write the LAC plan. During the session, participants engage in learning activities and collaborative discussion and develop action plans. After the session, members are expected to apply the agreed strategies and report on their results in subsequent sessions (Department of Education, 2016). A district-level examination of these components can identify which parts of the implementation cycle are strongest and which require additional policy support.

For journal reporting, the present article concentrates on the empirical components that are fully represented in the thesis results: teacher profile, the ten domains of LAC implementation, and associations between selected profile variables and those implementation domains. This focus provides a coherent account of the study evidence while retaining its original purpose of drawing implications for professional practice and policy formulation. Accordingly, the study addressed three questions. First, what are the demographic and professional characteristics of the participating public elementary school teachers in terms of gender, civil status, highest educational attainment, and length of service? Second, to what extent are the ten major LAC implementation domains enacted in the district? Third, are selected teacher profile characteristics associated with the reported level of implementation? The article further synthesizes the empirical findings into practice and policy implications for making LAC implementation more responsive, flexible, data informed, and sustainable.

1.1 Conceptual and Policy Framework

The study is situated at the intersection of social learning, professional learning communities, and the Philippine policy framework for school-based continuing professional development. These perspectives are complementary because each emphasizes that professional learning is not simply an individual acquisition of information. It is also a social and organizational process shaped by interaction, participation, routines, leadership, and opportunities to apply knowledge in practice.

Social constructivist thinking provides one foundation for understanding LAC. Vygotsky (1978) emphasized that learning is mediated through social interaction and that development is supported when individuals engage with others who can provide guidance, language, tools, and shared problem-solving opportunities. Although the original theory was developed in relation to human learning more broadly, its central insight is relevant to teacher professional development: teachers can extend their professional understanding by discussing problems with colleagues, observing alternative approaches, receiving feedback, and jointly interpreting classroom experience. Within a LAC, a less experienced teacher may benefit from the situated knowledge of a veteran colleague, while an experienced teacher may gain new perspectives from peers who are more familiar with recent technologies, curriculum changes, or instructional innovations.

The professional learning community literature provides a more organizationally specific lens. DuFour et al. (2010) described professional learning communities as structures in which educators engage collectively with questions about learning, evidence, intervention, and improvement. The emphasis is not merely on collegiality but on purposeful collaboration directed toward better educational practice. Vescio et al. (2008), in their review of professional learning communities, found evidence that well-developed collaborative communities can alter

teaching culture and practice and may contribute to improvements in student learning. LAC resembles this model because it organizes recurring teacher collaboration around shared instructional issues rather than treating professional development as an external event disconnected from daily work.

Collective efficacy is also relevant to the logic of LAC. Goddard et al. (2000) conceptualized collective teacher efficacy as a faculty's shared belief in its capacity to positively affect students. Collaborative structures can contribute to such beliefs by creating opportunities for teachers to pool expertise, observe successful practices, and see difficult problems as shared rather than purely individual. Moolenaar et al. (2012) further connected teacher collaboration networks and collective efficacy with school-level outcomes. Although the present study did not directly measure collective efficacy, the design of LAC assumes that collaborative problem solving and shared responsibility can strengthen professional capacity.

These theoretical ideas are operationalized through DepEd policy. DepEd Order No. 35, s. 2016 identifies LAC as a school-based continuing professional development strategy linked to established teacher competencies and the K to 12 curriculum (Department of Education, 2016). The policy emphasizes several broad content areas: learner diversity and inclusion; content and pedagogy; assessment and reporting; 21st-century skills and ICT integration; curriculum contextualization, localization, and indigenization; community linkages; and emerging concerns that affect teaching and learning. Importantly, the policy does not define LAC only by what teachers discuss. It also sets expectations for how sessions are planned and implemented.

The implementation cycle begins with assessment of needs. Professional development needs may be identified through self-assessment, classroom observation, critical reflection, surveys, research, learner assessment results, and other evidence. This diagnostic stage is essential because professional learning is more likely to be meaningful when it responds to actual competency gaps and learner needs. The next stage is prioritization of topics. Because schools face multiple concerns, participants must decide which issues are most urgent, feasible, and consequential. Prioritization converts a broad needs profile into a manageable professional learning agenda.

The formation of LAC groups is another contextual decision. DepEd guidance allows flexible grouping based on need, school size, grade level, key stage, learning area, program, or cluster arrangements. This flexibility reflects the fact that meaningful professional learning requires a balance between commonality and diversity. Teachers need enough shared context to engage deeply with a problem, while variation in experience and expertise can generate productive peer learning. LAC groups therefore function best when their composition is aligned with the purpose of the session. After a problem has been identified, the group selects an appropriate intervention. Interventions may include instructional materials, strategies, equipment, modalities, programs, coaching, peer support, or other actions suited to the identified need. Effective intervention selection requires practical relevance, evidence, feasibility, and attention to the local school context. The process should lead to actions that can be implemented and later evaluated, rather than ending with discussion alone.

Scheduling and resource preparation are equally important because professional learning competes with other responsibilities. DepEd recommends regular sessions while recognizing that local conditions may require flexibility and the use of ICT. Time is therefore not a minor administrative issue; it is an implementation condition that affects participation and continuity. Similarly, material and human resources must be available if professional learning is to move from planning to action. School heads play a central role in ensuring that resources, including budgetary support, are identified and sustained. Assignment of work, feedback, budgeting, and LAC planning complete the implementation structure examined in this study. Clear roles can distribute ownership and reduce dependence on a single facilitator. Feedback enables participants and leaders to evaluate whether sessions are relevant and whether agreed actions are producing the intended effects. Line-item budgeting connects professional learning priorities with available Maintenance and Other Operating Expenses and other permissible resources. The written LAC plan integrates these components and links professional development with broader school improvement processes.

Prior empirical studies provide support for examining implementation at this operational level. Bajar et al.

(2021) reported that a school LAC could help address out-of-field teaching by creating a collaborative mechanism through which teachers learned from colleagues and responded to instructional needs. Culajara (2023) likewise described School Learning Action Cell as a mechanism for strengthening professional development. More recent Philippine studies have continued to investigate implementation, teacher experiences, and links with professional practice (Dilay & Ramos, 2024; Macapodi & Labitad, 2025; Naungayan, 2025; Vega & Orleans, 2025). Taken together, this literature suggests that the value of LAC depends not only on its formal existence but also on the quality of local enactment.

The current study therefore treats LAC implementation as a multidimensional process. Rather than asking whether a school conducts LAC sessions, it examines ten connected implementation domains. This approach is useful for policy because an overall favorable rating can conceal weaker stages. For example, a school may be strong in assigning work and preparing budgets but weaker in diagnosing needs or selecting topics. Such differences matter because the early diagnostic and planning stages influence the relevance of everything that follows. The multidimensional framework makes it possible to identify these patterns and formulate targeted improvements.

2. Method

Research design. The study used a descriptive-correlational survey design. The descriptive component was used to summarize the profile of the respondents and their assessments of LAC implementation. The correlational component was used to examine whether selected demographic and professional characteristics were associated with implementation domains. This design was appropriate because the study sought to describe existing practices in their natural school context rather than manipulate professional development conditions.

Participants and setting. The study was conducted in Santa Cruz District, Santa Cruz, Ilocos Sur, and involved 151 public elementary school teachers. The thesis identifies the district's elementary teachers as the target population and describes the selection as purposive. Accordingly, the sample should be understood as a context-specific group of teachers who were available and willing to participate rather than as a probability sample intended to represent all Philippine public school teachers. The district setting is nevertheless substantively important because it allows a focused examination of how a national professional development policy is enacted within a local administrative and professional context.

Respondent characteristics were reported in terms of gender, civil status, highest educational attainment, and length of service. The chart data embedded in the thesis showed that 133 respondents were female and 18 were male; 22 were single, 125 were married, and 4 were widowed; 85 held a bachelor's degree as their highest qualification, 55 had a master's-level qualification, and 11 had doctorate-level attainment; and 9 had 0-3 years of service, 31 had 4-10 years, and 111 had more than 10 years of service. These characteristics were used to describe the workforce and, where available in the thesis analysis, to examine relationships with implementation.

Instrument. Data were gathered using a researcher-developed LAC Session Implementation Assessment Questionnaire. The instrument was developed from the LAC implementation processes described in DepEd policy and was reviewed by validators before administration. The thesis questionnaire contains items organized around ten implementation domains: (a) assessment of needs, (b) prioritization of topics, (c) formulation of LAC groups, (d) identification of appropriate intervention, (e) identification of appropriate learning needs, (f) scheduling of meetings, (g) assignment of work, (h) general feedback, (i) preparation of the line-item budget, and (j) writing of the LAC plan. Items ask respondents to evaluate such matters as facilitator support, relevance of topics, organization of sessions, practicality of interventions, scheduling, clarity of roles, feedback processes, budget transparency, and plan development.

The questionnaire used a five-point implementation scale. The thesis categorized scores of 4.50-5.00 as very highly implemented, 3.50-4.49 as highly implemented, 2.50-3.49 as moderately implemented, 1.50-2.49 as least implemented, and the lowest range as not implemented. In the results tables, most domain means between 4.40

and 4.50 were labeled "Very Highly Implemented." Because the thesis uses this descriptive labeling consistently in its reported results, the journal article retains the original labels when reporting the source findings while also presenting the numerical means so that readers can interpret the magnitude directly.

Data collection procedure. The researcher first reviewed literature and policy materials related to LAC and developed the survey instrument. The questionnaire was then submitted for validation. Permission to conduct the study was sought from relevant education authorities, including the Schools Division Superintendent, district and school leaders. After approval, respondents were oriented regarding the purpose of the study and how to complete the questionnaire. The thesis reports that questionnaires were personally distributed and retrieved by the researcher, with directions explained before participation. The collected data were then prepared for statistical analysis.

Ethical considerations. The thesis states that ethical clearance was sought from the college research committee and that participation in the research was voluntary. Participants were informed about the purpose of the study and their right to withdraw. Confidentiality and anonymity were protected by treating responses as research data rather than as individual performance records. The study also sought to minimize interference with teachers' professional responsibilities. These procedures are especially important in a school-based study because participation in LAC itself may be institutionally expected, whereas participation in research about LAC must remain voluntary.

Data analysis. Frequencies and percentages were used to summarize the profile variables. Means were used to describe the level of implementation in each LAC domain. The thesis reports using association tests to examine the relationship between profile variables and implementation. For gender and civil status, the results table provides test values and p values; for highest educational attainment and length of service, it provides correlation coefficients, with asterisks identifying coefficients significant at the .05 level. Because the table indicates statistical significance only for two length-of-service coefficients, interpretation in this article follows the reported table rather than the broader wording of the thesis conclusion. Effect sizes are interpreted conservatively, particularly because the significant coefficients are small.

The study has several methodological constraints that are important for interpreting the results. First, the data are self-reported and therefore represent teachers' perceptions of implementation rather than independent observations of LAC quality. Second, the sample is confined to one district and was not selected through probability sampling. Third, the thesis does not report internal consistency coefficients or a full psychometric evaluation of the questionnaire, so claims about the instrument should remain limited to its use in this local study. Finally, the cross-sectional design does not establish causal relationships between teacher characteristics and implementation.

3. Results

Respondent profile. The sample reflects a predominantly female and experienced public elementary school workforce. Of the 151 respondents, 133 (88.1%) were female and 18 (11.9%) were male. In terms of civil status, 125 (82.8%) were married, 22 (14.6%) were single, and 4 (2.6%) were widowed. With respect to highest educational attainment, 85 (56.3%) reported a bachelor's degree, 55 (36.4%) reported a master's-level qualification, and 11 (7.3%) reported doctorate-level attainment. Length of service further shows a veteran workforce: 111 teachers (73.5%) had more than 10 years of service, 31 (20.5%) had 4-10 years, and 9 (6.0%) had 0-3 years. This profile is consequential for interpreting LAC implementation. A highly experienced faculty may possess extensive contextual knowledge and established instructional routines, while also requiring professional development that is sufficiently relevant to avoid repetition of familiar content. The high proportion of married teachers also highlights the importance of practical scheduling because professional learning activities take place alongside instructional, administrative, and family responsibilities. The profile therefore supports the study's emphasis on contextualized and flexible implementation.

Overall level of LAC implementation. The ten LAC domains were all rated at a very high level in the thesis

results. The overall mean was 4.46. The highest domain mean was assignment of work (M = 4.50), followed by preparation of the line-item budget (M = 4.49) and general feedback (M = 4.48). Formulation of the LAC, identification of appropriate intervention, identification of appropriate learning needs, and scheduling of meetings each obtained a mean of 4.46. Writing of the LAC plan had a mean of 4.45. Assessment of needs and prioritization of topics were the lowest domains, both with means of 4.44. The range between the lowest and highest domain means was therefore only 0.06, indicating highly consistent favorable ratings across the implementation cycle.

Table 1

Demographic and Professional Profile of Respondents

Characteristic	Category	n	%
Gender	Female	133	88.1
	Male	18	11.9
Civil status	Single	22	14.6
	Married	125	82.8
	Widowed	4	2.6
Highest educational attainment	Bachelor's	85	56.3
	Master's	55	36.4
	Doctorate	11	7.3
Length of service	0–3 years	9	6.0
	4–10 years	31	20.5
	More than 10 years	111	73.5

Table 2

Summary of LAC Implementation Domains

LAC implementation domain	Mean	Reported descriptive rating
Assessment of needs	4.44	Very highly implemented
Prioritization of topics	4.44	Very highly implemented
Formulation of LAC	4.46	Very highly implemented
Identification of appropriate intervention	4.46	Very highly implemented
Identification of appropriate learning needs	4.46	Very highly implemented
Scheduling of meetings	4.46	Very highly implemented
Assignment of work	4.50	Very highly implemented
General feedback	4.48	Very highly implemented
Preparing the line-item budget	4.49	Very highly implemented
Writing the LAC plan	4.45	Very highly implemented
Overall	4.46	Very highly implemented

Note. Means and descriptive ratings are reported as presented in the thesis. Overall mean = 4.46.

Assessment of needs. Assessment of needs obtained an overall mean of 4.44. The highest-rated item concerned facilitator support in clarifying professional goals (M = 4.50). Teamwork and collaboration in identifying and addressing teaching challenges also received a high score (M = 4.47), as did the use of evidence-based instructional considerations (M = 4.46). Items on identifying gaps in knowledge and skills and leadership support were similarly favorable. The relatively lowest item concerned whether the needs assessment process was sufficiently thorough in addressing all relevant areas (M = 4.40). Although the absolute score remained high, this item identifies a possible weakness in the diagnostic stage. The pattern suggests that teachers perceived facilitators as supportive and the LAC environment as collaborative, yet the assessment process may still benefit from greater depth and systematic evidence. A strong needs assessment should not rely solely on perceptions expressed during meetings. It can triangulate self-assessment, classroom observation, learner performance data, professional standards, and school improvement priorities. The small difference between facilitator support and assessment thoroughness is therefore substantively meaningful even within an overall favorable set of responses.

Prioritization of topics. The domain mean for prioritization of topics was 4.44. Facilitator guidance in selecting topics that aligned with immediate goals, relevance to career progression, and attention to recurring challenges affecting multiple teachers or students each received means of 4.46. Feasibility in relation to available resources and expertise was also rated highly (M = 4.45). The lowest item in this domain concerned prioritizing innovative teaching methods, new technologies, or emerging trends (M = 4.39). This result suggests that topic selection was strongly anchored in immediate and shared problems, which is consistent with the purpose of school-based professional learning. At the same time, the relatively lower emphasis on emerging methods may indicate

that urgent local concerns can crowd out forward-looking professional learning. A responsive LAC system therefore needs to balance problem solving for present needs with anticipatory learning about curricular, technological, and pedagogical developments.

Formulation of LAC groups. Formulation of the LAC received a domain mean of 4.46. The structure of sessions being conducive to productive discussion and the facilitator's coverage of key aspects of consultation both received means of 4.50. Resource availability was also rated strongly (M = 4.48), while identifying shared challenges scored 4.47. The item with the lowest relative mean concerned aligning the LAC with specific individual professional growth goals (M = 4.40). These findings indicate that the organizational structure of LAC was viewed favorably. Respondents perceived sessions as well organized and adequately facilitated. However, the lower score for individual professional growth goals suggests that group-level relevance does not automatically guarantee individual-level fit. This distinction becomes important in a workforce that includes teachers with very different levels of experience and qualifications. Flexible grouping and differentiated learning pathways may help maintain collective collaboration while recognizing individual needs.

Identification of appropriate intervention. This domain also obtained a mean of 4.46. The highest-rated item was the extent to which the session helped teachers identify practical interventions to address their needs (M = 4.51). Sustainability and scalability of interventions received a mean of 4.50, and respondents rated both the realism of proposed interventions and facilitator guidance highly (M = 4.49 each). Follow-up planning and cultural appropriateness to the local school context received the lowest relative scores in this set (M = 4.42 each). The pattern indicates that LAC was particularly strong in moving from discussion toward practical action. However, identifying a workable intervention is only one stage of improvement. Follow-up is necessary to determine whether the intervention was implemented as intended and whether it produced useful results. Similarly, contextual relevance should be explicitly examined rather than assumed. The results therefore support stronger monitoring and locally sensitive adaptation.

Identification of appropriate learning needs. The overall mean was 4.46. The appropriateness of the intervention for student learning needs and the expectation that interventions directly address identified learning gaps each received means of 4.50. Clear identification and analysis of student learning gaps each scored 4.48. Items on evidence-based practice, curriculum alignment, and available resources were also highly rated. The lowest relative scores concerned assessing teachers' own professional development requirements and considering the time available for sessions and classroom implementation (M = 4.43 each). This domain reveals a strong learner-centered orientation. Teachers reported that LAC was closely connected to student learning needs and gaps. Yet the slightly lower rating for teacher-specific development needs again suggests a potential imbalance: LAC may be effective in diagnosing learner problems while giving somewhat less attention to the differentiated competencies teachers need in order to address those problems. A more explicit link between learner evidence and individual teacher development plans could strengthen this stage.

Scheduling of meetings. Scheduling obtained a mean of 4.46. Convenience of meeting time and consideration of participants' schedules received high ratings, as did the sufficiency of meeting length and the prompt scheduling of follow-up sessions. Somewhat lower ratings were given to alignment with the school calendar and with ongoing professional development deadlines. These results suggest that schools generally manage scheduling well, but scheduling remains an area where contextual pressures can emerge. The importance of scheduling becomes clearer when considered together with the length-of-service analysis reported below. Veteran teachers may hold additional roles, established routines, committee responsibilities, or family obligations that shape their perception of meeting schedules. Flexible formats, protected professional learning time, and careful integration with the school calendar can therefore help maintain participation without increasing workload strain.

Assignment of work. Assignment of work was the highest-rated domain, with a mean of 4.50. The clarity of participant roles and responsibilities received a mean of 4.56, while equitable distribution of workload scored 4.54. Communication of deadlines was also rated very highly (M = 4.52), and respondents reported that assigned tasks

were completed in a timely manner. The domain therefore appears to be a major strength of local LAC implementation. Clear role assignment supports collective responsibility by making participation concrete. Rather than viewing the LAC as the responsibility of the school head or facilitator alone, members can contribute through documentation, facilitation, resource preparation, demonstration, reporting, and follow-up. Rotating these responsibilities may also broaden leadership capacity and reduce dependence on a small number of teachers.

General feedback. General feedback had an overall mean of 4.48. The perceived effectiveness of the LAC session in addressing needs scored 4.51, while communication among participants, actionable next steps, and feedback related to collaboration were all rated highly. Reflection on feedback received a comparatively lower mean of 4.43, and individualized feedback scored 4.44. These findings indicate that communication was strong but suggest room for deepening the reflective and individualized use of feedback. Feedback is especially valuable when it closes the professional learning cycle. Participants should not only evaluate whether a session was satisfactory; they should use feedback to revise practice, revisit action plans, and identify new needs. Reflection journals, structured post-session reviews, and evidence from classroom implementation could help move feedback from general evaluation toward continuous improvement.

Preparation of the line-item budget. Budget preparation was one of the highest-rated implementation domains (M = 4.49). Transparency and consultation in budget preparation received the strongest item score (M = 4.57). Alignment of the budget with LAC priorities, realism of resource allocation, and clarity of budget categories were also highly rated. Ease of access to financial data had the lowest relative mean in the domain (M = 4.43), followed by administrative support (M = 4.45). The strong rating suggests that financial planning is relatively institutionalized in the district. This is important because professional development requires more than time and goodwill. Materials, connectivity, external expertise, equipment, and other needs may require direct expenditure. Transparent budgeting also supports trust and accountability. At the same time, improving access to financial information and linking budget decisions explicitly to prioritized pedagogical needs can strengthen the connection between administrative and instructional planning.

Writing of the LAC plan. Writing of the LAC plan obtained a mean of 4.45. Realistic timelines (M = 4.49), clarity of roles (M = 4.48), and overall efficiency and organization of the process (M = 4.47) were rated favorably. The plan's flexibility and adaptability received a mean of 4.46. Items connected with time needed for budget preparation and administrative assistance in budgeting received the lowest means (M = 4.40 each). The LAC plan is the mechanism through which diagnostic evidence, prioritized topics, grouping, interventions, schedules, roles, budgets, and monitoring expectations are integrated. Its slightly lower mean than operational areas such as assignment of work and budgeting suggests that implementation may be strongest when activities are being executed, while the integrative planning document could receive additional attention. A concise, data-linked planning template may help schools connect the parts of the cycle more explicitly.

Relationships between profile and implementation. The thesis reported a table examining profile variables in relation to the ten implementation domains. For gender, all reported p values were greater than .05, ranging from .353 to .898. For civil status, the p values were also greater than .05, ranging from .053 to .982. These results indicate no statistically significant association between gender or civil status and the implementation domains represented in the table. For highest educational attainment, the reported coefficients ranged from -.052 to .082 and were not marked as significant. These values are very small, suggesting that perceived LAC implementation was broadly similar across respondents with different educational attainment levels. This may reflect the standardized organizational character of LAC: while teachers bring different qualifications to the sessions, many implementation features such as schedules, task assignments, plans, and budgets are shared at the school or group level.

Length of service showed mostly small negative coefficients. Two relationships were marked significant at the .05 level: identification of appropriate learning needs (r = -.165) and scheduling of meetings (r = -.189). The direction indicates that teachers with longer service tended to give slightly lower ratings to these two domains.

The magnitude of both relationships is small and should not be interpreted as a strong demographic effect. Nevertheless, the pattern is practically relevant because it aligns with the need to differentiate professional learning and protect time for experienced teachers.

Table 3
Profile Variables and LAC Implementation Domains

Domain	Gender p	Civil status p	Highest education coefficient	Length of service coefficient
Assessment of needs	.834	.711	-.030	-.140
Prioritization of topics	.483	.981	-.052	-.149
Formulation of LAC	.898	.551	.020	-.140
Appropriate intervention	.477	.140	.036	.036
Appropriate learning needs	.539	.571	.026	-.165*
Scheduling of meetings	.725	.053	.002	-.189*
Assignment of work	.778	.982	.029	-.138
General feedback	.353	.455	.007	-.154
Preparing line-item budget	.720	.952	.045	-.131
Writing LAC plan	.733	.960	.082	-.152

Note. * Significant at the .05 level (two-tailed), as marked in the thesis table. Gender and civil status columns report p values; highest educational attainment and length of service columns report coefficients.

Overall, the relationship results do not support a broad claim that teacher demographic characteristics determine LAC implementation. Instead, implementation appears to be experienced relatively consistently across profile groups, with only limited evidence that length of service is related to two specific domains. This is an important distinction for policy. It suggests that universal district structures may be functioning well, while targeted adjustments can be made for particular professional circumstances without redesigning the entire LAC system around demographic categories.

4. Discussion

The study presents a generally favorable picture of LAC implementation in Santa Cruz District. Teachers rated all ten implementation domains very highly, and the narrow range of means indicates that the process is not strong in only one or two areas. Needs assessment, topic prioritization, group formation, intervention selection, learning-needs identification, scheduling, assignment of work, feedback, budgeting, and plan writing all appear to be established practices. This broad pattern is consistent with the institutional logic of DepEd Order No. 35, s. 2016, which positions LAC as a regular school-based professional development process rather than an optional activity (Department of Education, 2016).

The highest rating for assignment of work is especially noteworthy. Professional learning communities often depend on distributed participation rather than on a single leader delivering content to passive participants. Clear roles can support ownership, accountability, and continuity. This finding resonates with the collaborative orientation described in the professional learning community literature, where improvement is linked to collective work around shared problems (DuFour et al., 2010; Vescio et al., 2008). In practical terms, a LAC in which responsibilities are clearly assigned is more likely to generate documentation, resources, follow-up actions, and shared leadership.

The strong rating for line-item budgeting provides a complementary administrative insight. Collaborative professional development is sometimes discussed primarily in pedagogical terms, yet implementation depends on organizational capacity. The ability to plan and communicate budgets, align resources with priorities, and follow public accounting procedures can determine whether proposed activities are feasible. The result suggests that the district has relatively strong administrative routines supporting LAC. This is valuable because school-based professional learning is more sustainable when it is embedded in normal planning and resource systems rather than dependent on extraordinary or personal expenditures.

General feedback also emerged as a relative strength. Effective feedback can reinforce the cyclical nature of professional learning by helping participants evaluate what occurred and what should happen next. However, the

item-level results suggest that reflection and individualized feedback were somewhat less strongly rated than general communication. This distinction matters. Feedback that merely confirms whether a session was successful is useful for accountability, but professional learning requires a deeper cycle in which teachers examine how new ideas affected classroom practice. Structured reflection and evidence from implementation can strengthen this link.

The relatively lower ratings for assessment of needs and prioritization of topics deserve attention precisely because they occur at the beginning of the LAC cycle. If needs are diagnosed incompletely, later stages may be well organized but less relevant. Similarly, if topics are prioritized mainly on the basis of immediate common concerns, longer-term professional learning needs can be overlooked. Desimone's (2009) framework for effective professional development emphasizes coherence, content focus, active learning, duration, and collective participation. Coherence begins with a clear understanding of what teachers and learners need. Thus, a district can be administratively efficient while still improving the diagnostic sophistication of professional learning.

The lowest item in the prioritization domain concerned innovative methods and emerging technologies. The score was still high, but the relative difference points to a common tension in school-based professional development. Local professional learning is valuable because it addresses immediate, context-specific problems; however, a purely reactive agenda may not prepare teachers for emerging changes. Schools therefore need a dual approach. One portion of the LAC agenda can address urgent learner and instructional needs, while another portion can deliberately introduce innovations that teachers may not yet identify as immediate problems. This balance is particularly important for ICT integration, new assessment approaches, and curriculum transitions.

The results for formulation of LAC groups and identification of learning needs reveal a related issue: collective relevance is strong, but individual differentiation could be strengthened. Respondents rated shared challenges, session structure, and resource availability highly, while items connected with specific individual professional growth goals and teacher-specific development needs received somewhat lower means. This pattern is understandable because LAC is fundamentally a group mechanism. Yet a group can contain novice teachers, mid-career teachers, veteran teachers, bachelor's degree holders, and teachers with postgraduate qualifications. Their learning needs are unlikely to be identical.

A more differentiated approach does not require abandoning collective learning. Instead, schools can use common problems as a shared anchor while allowing different pathways, tasks, or roles. For example, novice teachers might focus on foundational classroom routines and curriculum planning, while veteran teachers might lead lesson study, mentoring, action research, technology integration, or policy implementation projects. Teachers could also use individual development plans to identify personal goals that are then connected to group activities. This would preserve the social learning benefits of LAC while making participation more professionally meaningful. The significant but small negative relationships between length of service and both identification of appropriate learning needs and scheduling of meetings provide empirical support for such differentiation. Experienced teachers may perceive generic needs assessments as less useful if the process does not recognize accumulated expertise. They may also have greater role complexity, including mentoring, committee, administrative, or family responsibilities that make schedules more difficult. The coefficients are too small to support strong demographic claims, but they identify areas where veteran teachers may need different forms of engagement.

Flexible scheduling is therefore not simply a convenience. It is a participation strategy. DepEd policy already permits adaptation in frequency, format, and the use of ICT when face-to-face sessions are difficult (Department of Education, 2016). The study's findings support making this flexibility more systematic. Schools can protect regular professional learning time within the calendar, use blended or asynchronous components when appropriate, rotate schedules, and avoid placing LAC repeatedly after already demanding instructional days. Such approaches may be especially useful when schools include teachers with different workload patterns or when clustered schools must coordinate across locations.

The strong scores for identifying practical interventions are encouraging because they suggest that LAC is not

limited to discussion. Respondents perceived interventions as realistic, applicable, and capable of supporting long-term improvement. This practical orientation is consistent with studies that describe LAC as a mechanism for addressing specific instructional problems and professional development needs (Bajar et al., 2021; Culajara, 2023). Nevertheless, follow-up and cultural appropriateness were the lower-rated items in this domain. These should be strengthened because the educational value of an intervention cannot be judged only at the point of selection.

A robust LAC cycle would treat intervention implementation as a small-scale inquiry. Teachers identify a problem, choose a strategy, specify indicators of success, implement the strategy, collect evidence, discuss the evidence, and decide whether to continue, adapt, or discontinue the approach. Such a cycle has affinities with lesson study, action research, and collaborative inquiry. It also reduces the risk that LAC becomes a sequence of topics without cumulative learning. The repeated nature of school-based professional development creates an opportunity to build institutional memory by documenting what was tried and what was learned. The overall absence of strong demographic relationships is another meaningful result. Gender, civil status, and highest educational attainment were not significantly associated with the implementation domains in the reported analysis. This suggests that LAC is experienced largely as a shared organizational practice rather than as a process segmented by basic demographic groups. From an equity perspective, this is positive: the core structures appear broadly accessible. Policy improvements can therefore focus on implementation conditions and professional roles rather than assuming that demographic categories themselves are barriers.

At the same time, the results should not be interpreted as evidence that context is unimportant. The sample itself illustrates how context shapes implementation questions. A workforce composed largely of experienced, married women will encounter particular scheduling, mentoring, leadership, and career-development realities. Context should therefore be treated as a design consideration rather than a deterministic variable. The goal is not to predict implementation from demographics but to organize professional learning in ways that acknowledge the people who participate. The findings also reinforce the importance of school leadership. Although the study did not estimate a separate leadership model, many highly rated items refer to facilitator guidance, organizational structure, resource availability, and administrative support. Hall and Hord (2015) emphasized that educational change requires attention to the processes through which individuals and organizations adopt new practices. In LAC, school leaders shape these processes by protecting time, appointing facilitators, ensuring resources, linking LAC plans with school priorities, and creating expectations for follow-through. Leadership is therefore most effective when it enables teacher agency rather than replacing it.

The study contributes to Philippine research on LAC by showing that implementation can be examined as a sequence of interconnected operational domains. Previous studies have established the relevance of LAC for teacher development and instructional practice (Bajar et al., 2021; Culajara, 2023; Silva, 2021). The present results add a district-level perspective that differentiates stronger and weaker points within the implementation cycle. The distinction is useful for improvement because a single global rating of LAC effectiveness could obscure where support is actually needed.

Finally, the study highlights a policy-practice relationship that is often overlooked. Policies establish minimum structures, but schools interpret and enact those structures. Local practice, in turn, generates evidence that can refine policy. A responsive LAC system should therefore operate as a feedback loop: national and division guidelines structure local action; schools collect evidence about implementation; district leaders identify recurring strengths and constraints; and those findings inform subsequent guidance, resource allocation, and monitoring. This recursive relationship is especially important in a decentralized professional learning model because the value of flexibility depends on the capacity to learn from local implementation.

4.1 Implications for Practice and Policy

The empirical pattern supports a set of targeted implications rather than a wholesale redesign of LAC. Because all domains were rated highly, the priority is to deepen the quality of implementation, particularly at the points

where small relative weaknesses were observed.

- First, needs assessment should become more systematic and evidence based. Schools can combine teacher self-assessment, classroom observation, learner performance data, professional standards, and reflective accounts rather than relying on a single source. Quarterly or periodic needs reviews could help prevent annual LAC plans from becoming static. The objective is to ensure that professional learning topics emerge from current evidence and can be connected to measurable instructional concerns.

- Second, topic prioritization should balance immediate needs with future-oriented professional learning. Shared local problems should remain central because they make LAC relevant, but schools can also reserve space for emerging pedagogy, curriculum developments, digital tools, assessment innovation, and inclusive practices. Collaborative ranking or voting processes may help make priorities transparent while preserving teacher voice.

- Third, LAC groups should be organized flexibly. Grade-level and subject-based grouping may be appropriate for some concerns, while cross-grade or interdisciplinary grouping may be more useful for school-wide issues. Experience-based mentoring pairs or temporary inquiry teams can be created when the problem requires specialized expertise. Virtual or blended communities may extend collaboration across schools when local numbers or expertise are limited.

- Fourth, individualized development should be linked to collective learning. The lower ratings for teacher-specific professional growth suggest the value of connecting LAC activities with individual development plans. Teachers can identify personal competencies they wish to strengthen and then select roles, tasks, or subprojects within the LAC that advance those goals. This approach is particularly suitable for a workforce with substantial variation in experience and educational attainment.

- Fifth, intervention selection should include explicit follow-up. Each intervention can be accompanied by a simple implementation record specifying the problem addressed, the action taken, the evidence to be collected, and the date for review. Subsequent LAC sessions can begin by examining the results of previous actions. This would institutionalize a continuous improvement cycle and make professional learning cumulative.

- Sixth, scheduling should be protected and flexible. The small negative relationship between length of service and scheduling suggests that a single scheduling approach may not serve all teachers equally well. Schools can integrate LAC into annual calendars, avoid repeated conflicts with peak workload periods, rotate meeting times when necessary, and use asynchronous resources for components that do not require synchronous discussion. Flexibility should support participation without reducing the collaborative character of LAC.

- Seventh, distributed leadership should be maintained as an implementation strength. The high score for assignment of work indicates that role clarity is already well developed. Schools can build on this strength through rotational facilitation, documentation, peer mentoring, and committee leadership. Such rotation helps develop leadership capacity among teachers and reinforces the principle that professional learning is a collective responsibility.

- Eighth, budgeting should remain transparent but become more tightly connected with pedagogical priorities. The strong budgeting results show administrative capacity. The next step is to make resource allocation visibly traceable to needs and interventions. A simple budget-to-priority mapping can show how requested materials, technology, external expertise, or connectivity support identified professional learning outcomes.

- Ninth, feedback should move from satisfaction to evidence of change. General evaluations can be supplemented with reflection journals, peer observation notes, samples of revised instructional materials,

student work, or brief action-research summaries. Anonymous feedback channels may also help teachers raise concerns about facilitation, relevance, or workload. The aim is to create a safe feedback culture that improves future LAC cycles.

- Tenth, the written LAC plan should function as a living improvement document. Rather than being completed mainly for compliance, the plan can be updated when evidence changes. It should show the connection among needs, priorities, participants, interventions, schedules, resources, expected outcomes, and monitoring. Digital collaborative templates may reduce administrative burden and make revisions easier.

These recommendations can be summarized as a policy framework built around five principles: responsiveness, differentiation, flexibility, accountability, and sustainability. Responsiveness requires LAC to begin with current evidence about teacher and learner needs. Differentiation recognizes that teachers have different expertise and professional goals. Flexibility allows grouping, scheduling, and delivery modes to match local conditions. Accountability requires clear roles, transparent resources, monitoring, and follow-up. Sustainability links LAC with school improvement planning, budgets, leadership development, and repeated cycles of evidence-informed learning.

At the district and division levels, policy can support these principles by establishing minimum quality expectations without over-standardizing local practice. For example, guidelines can require evidence-based needs assessment, an explicit link to teacher development plans, protected professional learning time, an intervention follow-up mechanism, and annual review of LAC effectiveness. Schools can retain discretion over the specific topics, groupings, tools, and formats used to meet those expectations. This balance preserves the contextual strength of school-based professional development while reducing the risk of superficial compliance.

Table 4

Proposed Practice and Policy Framework for Strengthening LAC Implementation

Policy principle	Practice focus	Policy support
Responsiveness	Use multiple data sources for needs assessment; revisit priorities periodically.	Require evidence-linked needs reviews and alignment of LAC topics with current teacher and learner needs.
Differentiation	Connect individual professional goals with collective LAC work; use flexible grouping and mentoring.	Link LAC participation with individual development plans and career-stage needs.
Flexibility	Protect time; use blended/asynchronous components when appropriate; rotate schedules.	Recognize multiple delivery formats while safeguarding regular collaborative time.
Accountability	Specify roles, intervention indicators, feedback, and follow-up.	Require monitoring evidence and district-level feedback that informs the next LAC cycle.
Sustainability	Align budgets, resources, and LAC plans with school improvement priorities.	Integrate LAC with school planning, resource allocation, and annual review.

4.2 Limitations and Future Research

Several limitations should be considered. The study is based on one public school district, and the purposive, context-specific sample limits generalization beyond the participating schools. Future research could use multi-district or multi-division sampling to compare implementation across urban, rural, geographically isolated, and resource-diverse contexts.

Second, the measures rely on teacher self-report. The very high means across all domains may partly reflect positive response tendencies, organizational loyalty, or a tendency to evaluate established school practices favorably. Future studies should triangulate survey responses with LAC plans, attendance records, session observations, facilitator logs, budgets, teacher artifacts, and evidence of classroom implementation. Third, the

thesis does not report full psychometric evidence for the implementation questionnaire. Future research should examine content validity, factor structure, internal consistency, convergent validity, and measurement invariance before using the instrument for broader comparisons. A validated multidimensional LAC implementation scale would be particularly useful for division and regional monitoring.

Fourth, the cross-sectional correlational design cannot establish causal effects. The study describes perceived implementation and limited associations with teacher characteristics, but it does not demonstrate that stronger LAC implementation causes gains in teacher competence or student achievement. Longitudinal and quasi-experimental designs could examine whether changes in implementation quality predict changes in instructional practice and learner outcomes over time. Fifth, the relationship table in the thesis contains limited statistical detail. Future studies should clearly match each variable with an appropriate statistical test, report exact p values, confidence intervals, and effect sizes, and account for clustering of teachers within schools. Multilevel analysis would be especially appropriate when data are collected from multiple schools because LAC implementation is partly a school-level phenomenon.

Finally, future research should examine the mechanisms suggested by the present findings. These include whether differentiated LAC pathways improve engagement among veteran teachers, whether protected or flexible schedules increase participation, whether stronger needs diagnostics improve topic relevance, and whether systematic intervention follow-up increases transfer to classroom practice. Such studies would move the literature from description of implementation toward explanation of how LAC produces professional learning.

5. Conclusion

The study shows that Learning Action Cell implementation in Santa Cruz District is perceived by public elementary school teachers as broadly and consistently strong. All ten implementation domains received very high ratings, with particular strengths in assignment of work, line-item budgeting, and general feedback. Assessment of needs and prioritization of topics were relatively lower but remained highly rated. These differences suggest that the district has strong organizational routines for conducting LAC while still having opportunities to strengthen the diagnostic and strategic stages that determine the relevance of professional learning. Teacher profile variables were generally unrelated to implementation ratings. Gender, civil status, and highest educational attainment showed no significant relationships in the reported results. Length of service was only weakly and negatively associated with identification of appropriate learning needs and scheduling of meetings. The findings therefore support a view of LAC primarily as an organizational practice shared across teachers, with selective adaptations needed for differences in professional experience and workload. For practice, the most important next step is to make LAC more evidence driven, differentiated, reflective, and connected to classroom follow-up. For policy, the challenge is to protect the flexibility of school-based professional learning while establishing expectations for needs assessment, protected time, resource alignment, monitoring, and continuous improvement. When these conditions are present, LAC can function not simply as a required meeting but as a sustained professional learning community through which teachers collectively examine problems, test responses, and improve educational practice.

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