



# **THE LEARNING ACTION CELL AS SCHOOL-BASED CONTINUING PROFESSIONAL DEVELOPMENT STRATEGY: ITS IMPLEMENTATION, BENEFITS AND CHALLENGES**

Joy B. Eslabra  
Marites P. Talosig

*Saint Ferdinand College-City of Ilagan Campus, City of Ilagan, Isabela, Philippines*

<https://doi.org/10.5281/zenodo.20398198>

## **ABSTRACT**

The study investigates the Learning Action Cell (LAC) as a school-based continuing professional development strategy for teachers in Tumauini Integrated Schools, Isabela, Philippines. Grounded in a quantitative phenomenological approach, the research examines the implementation, benefits, and challenges of LAC sessions across senior high school, junior high school, and elementary school teachers. Data were collected through structured questionnaires and analyzed using frequency counts, weighted means, and non-parametric tests (Kruskal-Wallis H test and Mann-Whitney U test) to determine significant differences across teacher profiles. Results indicate that LAC sessions are highly effective in enhancing teachers' knowledge, pedagogical skills, professional attitudes, role perceptions, and instructional strategies, with no significant variations observed across demographic and professional backgrounds. Teachers reported improvements in lesson planning, student inclusion, curriculum contextualization, and the application of assessment strategies, suggesting that LAC fosters a shared professional identity and collaborative practice. Nevertheless, operational challenges—such as scheduling conflicts, resource limitations, facilitator preparedness, and curriculum alignment—were identified as moderately serious concerns requiring administrative intervention. Proposed interventions include structured scheduling, resource pooling, facilitator training, and curriculum-aligned session planning to institutionalize and sustain the effectiveness of LAC. Overall, the study affirms that LAC serves as a practical, inclusive, and reflective platform for continuous professional growth, supporting teacher development and ultimately contributing to improved student learning outcomes.

**Keywords:** *Learning Action Cell, professional development, teacher collaboration, instructional strategies, curriculum contextualization*

## INTRODUCTION

Modern society places increasing demands on the quality of teaching and learning. To meet current standards in basic education, teachers must demonstrate strong expertise in subject content, pedagogy, and assessment. Recognizing this, the Department of Education (DepEd) has prioritized continuous professional development, particularly in the context of the K to 12 curriculum and the evolving needs of learners.

Republic Act No. 10533, also known as the Enhanced Basic Education Act of 2013, reinforced the Philippine education system by mandating comprehensive support for teacher growth and capacity-building (Republic Act No. 10533, 2013). In line with this legislation, DepEd issued Order No. 43, s. 2013, which outlined the Implementing Rules and Regulations of the Act. This policy institutionalized school-based professional development programs designed to strengthen curriculum delivery, improve instructional practices, and enhance assessment strategies (Department of Education [DepEd], 2013).

DepEd Order No. 35, s. 2016 institutionalized the Learning Action Cell (LAC) as a school-based continuing professional development strategy within the K to 12 Basic Education Program. The LAC functions as a collaborative learning session where teachers collectively address challenges in areas such as learner diversity and inclusion, curriculum content and pedagogy, assessment and reporting, and the integration of 21st-century skills with ICT (DepEd, 2016). This order underscores the importance of teacher collaboration as a key mechanism for enhancing classroom practices and improving student learning outcomes.

Further reinforcing this initiative, DepEd Order No. 42, s. 2017 introduced the National Adoption and Implementation of the Philippine Professional Standards for Teachers (PPST). The PPST provides a unified framework for teacher development, serving as the foundation for all learning and professional growth programs. It establishes clear expectations across career stages and defines standards in domains such as content knowledge and pedagogy, learning environment, curriculum and planning, assessment and reporting, and community linkages (DepEd, 2017). Together, these policies highlight the Department of Education's commitment to elevating teacher quality and ensuring effective learning for all students.

More recently, DepEd Order No. 14, s. 2023 reinforced collaborative and interdisciplinary efforts within schools. The order highlights the importance of coordinated initiatives that support teacher development and improve learning outcomes (Department of Education, 2023).

Within the current policy framework, the Learning Action Cell (LAC) functions as a collaborative venue where teachers exchange effective practices, address classroom challenges, and design strategies tailored to learner needs. Schools such as Tumauni

Integrated School and Lapogan Integrated School conduct LAC sessions to enhance teacher expertise in curriculum implementation, instructional approaches, and assessment methods. Educators highlight improvements in teamwork, communication, classroom management, and professional confidence as outcomes of these sessions. At the same time, they also encounter persistent challenges, including limited time, extensive documentation requirements, and resource constraints.

Given these conditions, it is essential to explore how the Learning Action Cell (LAC) contributes to teacher training and professional skill development. This study examines the implementation of LAC in Tumauni Integrated School, encompassing both the South and North Districts, and investigates its connection to teacher performance and professional growth. The findings are intended to serve as a foundation for strengthening and institutionalizing LAC practices within the school context.

## Research Questions

This study sought to examine the impact of incorporating Action Cell into teacher training programs on skills development during the school year 2023–2024, considering the influence of selected variables.

1. What is the profile of the respondents in terms of:
  - a. Age
  - b. Sex
  - c. Civil status
  - d. Designation
  - e. length of service
  - f. Highest educational degree completed
2. How do the respondents assess the implementation of the Learning Action Cell in terms of:
  - a. Learner diversity and student inclusion
  - b. Lesson content and pedagogy
  - c. Assessment and reporting
  - d. Curriculum contextualization, localization, and indigenization
3. How does the Learning Action Cell as a professional development strategy benefit teachers in terms of:
  - a. Knowledge and skills
  - b. Attitudes and values
  - c. Perceptions of professional responsibilities
  - d. Methodology and strategies in teaching
4. Does the effect of the Learning Action Cell significantly differ when teacher respondents are grouped according to their profile?
5. What are the problems and challenges encountered during School Learning Action Cell?
6. What are the intervention programs to institutionalized learning action cell?

## METHODOLOGY

### Research Design

This study employed a quantitative research design grounded in a phenomenological approach to explore human experiences, specifically focusing on individuals' thoughts, emotions, attitudes, behaviors, and interpersonal connections. The use of this method is appropriate because the questionnaire served as the primary instrument for data collection, ensuring that the measurement procedures and subsequent data analysis were closely aligned with the survey framework. Furthermore, the responses were systematically analyzed using a Likert scale, which provided a structured means of quantifying perceptions and experiences

### Locale of the Study

The study was conducted across all Integrated Schools of Tumauni South and North Districts in Tumauni, Isabela, Philippines, which served as the focal point of the research. This location was deliberately chosen for its blend of urban and rural characteristics, offering a diverse backdrop for examining Learning Action Cell (LAC) sessions among junior high school teachers and the preparation practices of elementary teachers. Tumauni, Isabela is notable for its scenic natural environment, cultural richness, and steadily growing population—all of which contribute to the complexity and dynamism of its educational landscape. Situated in the northern portion of the province of Isabela, Tumauni is a quiet town that boasts several landmarks and tourist attractions. Among these is the Camp Samal Resort and Leisure Park, often referred to as a “semi-Tagaytay” because of its elevated location. From this vantage point, visitors can enjoy panoramic views of the entire town to the west, south, and north, as well as the majestic Cordillera and Sierra Madre mountain ranges to the east.

### Selection and Description of Respondents

The respondents to the study were seven Senior High School teachers representing Grades 11-12, thirty-eight Junior High School teachers representing Grades 7-10 and thirty-one teachers from grade 1-6 elementary teachers. Purposive sampling was used to get the teacher -respondents. The distribution of respondents is shown below:

School	Senior High School	Junior High School Teachers	Elementary Teachers	Total
Lapogan Integrated School	0	12	13	25
Bayabo East Integrated School	0	8	8	16
Cumabao Integrated School	7	18	10	35
Total	7	38	31	76

## Data Gathering Procedure

The researcher personally undertook the collection of data. A formal letter requesting permission to conduct the study was prepared and addressed to the School Division Superintendent and the principal of the school under investigation. Initially, the researcher sought approval from the School Division Superintendent. Once permission was granted, the researcher personally distributed the questionnaires to the selected teacher-respondents, which included Grade 11–12 teachers, Grade 7–10 teachers, and elementary teachers from Grades 1–6. The respondents were given sufficient time to complete the questionnaires, after which these were retrieved for analysis.

## Statistical Treatment of Data

The data gathered was consolidated and analyzed using the following statistical tools:

**Frequency and Percentage Count.** These was used to analyze the profile of the respondents.

**Weighted Mean.** To determine the effects of learning action cell session in their teacher training and skills development both junior high school teachers and elementary teachers, the Average Weighted Mean (AWM) was employed.

**Kruskal Wallis HTest and Mann Whitney Utest.** This were used to determine the significant difference in the effect of professional development program, LAC on teacher-respondents when grouped according to profile.

**Kruskal Wallis HTest and Mann Whitney Utest** were employed in determining the significant difference in the effect of professional development program, LAC on teacher-respondents when grouped according to profile.

## RESULTS AND DISCUSSION

1. What is the profile of the respondents in terms of :
  - a. Age

**Table 1**  
**Frequency and Percentage Distribution of Respondents According to Age**

Age	Frequency	Percentage
21–25 years old	5	6.6
26–30 years old	20	26.3
31 years old and above	51	67.1
<b>Total</b>	<b>76</b>	<b>100</b>

Table 1 presents the frequency and percentage distribution of the respondents in terms of age.

As presented in the table, the majority or 67.1% of the respondents belong to the age group of 31 years and above, whereas only 6.6% fall within the 21–25 age bracket. This distribution indicates that most participants are experienced professionals, a factor that may have influenced the depth and quality of engagement in LAC sessions. Tanner and Tanner (2007) argue that professional development is most effective when aligned with the developmental stages of a teacher’s career, suggesting that older teachers are more likely to approach LACs with greater intentionality and purpose

**b. Sex**

**Table 2**  
**Frequency and Percentage Distribution of the Respondents According to Sex**

Gender	Frequency	Percentage
Female	62	81.6
Male	14	18.4
<b>Total</b>	<b>76</b>	<b>100</b>

Table 2 shows the frequency and percentage distribution of respondents by sex. As shown, majority of the respondents are female, comprising 62 respondents or 81.6 percent, while 14 respondents, or 18.4 percent, are male. This pattern reflects the national trend in basic education, where the teaching workforce is predominantly female. De Rosas et al. (2019) notes that teacher collaboration activities, such as Learning Action Cells (LACs), tend to flourish in environments that value communication and reflective practices—traits often associated with female-majority teaching teams.

**Table 3**  
**Frequency and Percentage Distribution of Respondents According to Civil Status**

Civil Status	Frequency	Percentage
Single	10	13.2
Married	62	81.6
Widow	4	5.3
<b>Total</b>	<b>76</b>	<b>100</b>

Table 3 reveals the frequency and percentage distribution of respondents according to civil status. Out of the total participants, 81.6% are married, 10 respondents are single, and four are widowed. This distribution indicates that the majority of respondents during the conduct of the study are married teachers, suggesting that they likely had more established professional routines and longer tenure in their positions. As noted by Vega (2020), experienced teachers are often those who have settled into long-term roles and tend to participate more consistently in school-based professional development activities such as LAC sessions. Their sustained involvement contributes to continuity and fosters deeper sharing of best practices among colleagues.

**c. Designation**

**Table 4**  
**Frequency and Percentage Distribution of Respondents According to Designation**

Designation	Frequency	Percentage
Teacher I	18	23.7
Teacher II	6	7.9
Teacher III	45	59.2
Master Teacher I	7	9.2
<b>Total</b>	<b>76</b>	<b>100</b>

Table 4 presents the distribution of respondents according to their designation. The data show that Teacher III holds the largest share, with 45 respondents, followed by Teacher I with 18 respondents. Meanwhile, Master Teacher I accounts for seven respondents, and Teacher II represents six respondents.

The predominance of Teacher III indicates a workforce characterized by substantial teaching experience and professional maturity. This designation requires proven instructional competence and consistent classroom performance, suggesting that the majority of participants have advanced skills in classroom management and curriculum delivery. Their strong presence likely enriched the Learning Action Cell (LAC) sessions, fostering more dynamic peer discussions and effective mentoring throughout the study.

Gonzalez (1986) emphasized that enhancing teacher competence is key to improving education quality. Having a strong representation of Teacher III respondents supports the effectiveness of LACs as they likely bring deeper instructional experience and leadership.

#### e. Length of Tenure

**Table 5**  
**Frequency and Percentage Distribution of Respondents According to Length of Tenure**

Length of Tenure	Frequency	Percentage
0–3 years	15	19.7
4–6 years	22	28.9
7–10 years	16	21.1
11 years and above	23	30.3
<b>Total</b>	<b>76</b>	<b>100</b>

Table 5 displays the distribution of respondents according to their length of service. The data show that the largest proportion of 30.3% have been in service for more than 11 years. This is followed by 28.9% who have served between 4 and 6 years, 21.1% with 7 to 10 years of experience, and the smallest group, 19.7%, with 0 to 3 years of service.

These figures suggest that a considerable number of participants had already accumulated extensive teaching experience at the time of the study. As noted by Lassonde (2020), educators with longer tenure contribute valuable historical insight and contextual understanding to professional learning sessions, thereby enriching discussions within Learning Action Cell (LAC) groups.

**e. Highest Education Degree Completed**

**Table 6**  
**Frequency and Percentage Distribution of the Respondents in terms of Highest Education Degree Completed**

Highest Education Degree	Frequency	Percentage
Bachelor's Degree	14	18.4
With Master's Degree units	31	40.8
Master's Degree	23	30.3
With Doctoral Degree units	5	6.6
Doctoral Degree	3	3.9
<b>Total</b>	<b>76</b>	<b>100</b>

Table 6 shows the frequency and percentage distribution of respondents according to their highest educational attainment. The data reveal that 40.8% of the teachers have units towards a Master's Degrees, followed by 30.3% who have completed a Master's Degree. Fourteen respondents or 18.4% possess a Bachelor's Degree, while five of 6.6% have earned Doctoral units, and three or 3.9% have completed a Doctoral Degree.

This distribution implies that most respondents are either pursuing or have already achieved graduate-level education at the time of the study. As Campbell (2020) notes, professional development tends to have more impact when participants have a solid academic foundation. In this context, Learning Action Cell (LAC) sessions are likely enriched by the advanced preparation of the teachers involved.

Interview responses among the respondents reinforce the profile data. Veteran teachers explained that their years of service have strengthened their confidence in LAC discussions. One participant mentioned, *"Having taught for more than a decade, I feel at ease sharing classroom strategies during LAC."* In contrast, younger teachers expressed gratitude for the guidance they receive from senior colleagues. A 24-year-old respondent remarked, *"I gain more insights when experienced teachers explain how they managed similar situations in the past."* These perspectives align with the quantitative results, which show that most respondents are seasoned educators. The presence of senior teachers fosters consistent participation and the exchange of expertise during LAC sessions.

According to Wenger (2018), successful communities of practice thrive when members are both active and reflective, engaging deeply within their professional environments. In the context of Learning Action Cells (LACs), the involvement of educators with advanced qualifications and extensive experience enhances the quality of collaboration. This supports the observations of Culajara (2022) and De Vera et al. (2020),

who emphasized that LACs are most effective when guided by dedicated and competent teachers.

**2. How do the respondents assess the LAC implementation in terms of:  
a. Learners Diversity and Student Inclusion**

**Table 7  
Weighted Mean and Qualitative Description of the Respondents' Assessment of  
LAC Implementation in terms of Learner Diversity and Student Inclusion**

Statement	Weighted Mean	Qualitative Description
1. Include learner diversity and student inclusion as topic for discussion in the session.	3.86	To a Great Extent
2. Emphasize that learners are the reason for all education process	3.80	To a Great Extent
3. Establish learning environments that are responsive to learner diversity	3.95	To a Great Extent
4. Underscore the importance of teacher's knowledge and understanding of learners' characteristics and experiences	3.92	To a Great Extent
5. Discuss that diversity emanates from a variety of factors such as gender, community membership, religious beliefs, family configurations and special learning needs	3.91	To a Great Extent
6. Celebrate diversity in their classrooms	3.83	To a Great Extent
7. Differentiate their instruction to include all learners	3.92	To a Great Extent
8. Adjust their instruction to foster harmony in class	3.91	To a Great Extent
9. Provide remedial instruction for those who are experiencing difficulties in learning lessons	3.76	To a Great Extent
10. Prevent failure and communicating with their learners	3.92	To a Great Extent
11. Address the learners needs as to strength, interests, and experiences	3.96	To a Great Extent

12. Give additional information on the different indigenous groups.	3.89	To a Great Extent
13. Encourage learners to be holistically developed learners	3.97	To a Great Extent
Overall Weighted Mean	3.89	To a Great Extent

Table 7 presents the weighted mean and qualitative description of respondents' assessments of LAC implementation in relation to learner diversity and student inclusion. All items were rated "To a Great Extent", indicating a generally positive perception among teachers regarding the integration of diversity-sensitive themes in LAC discussions. The highest-rated item, Statement 13, "*Encourage learners to be holistically developed learners*" received a mean score of 3.97. This implies that LAC sessions strongly emphasize the holistic development of students, addressing not only academic achievement but also their social and emotional growth. This findings resonate with Madriaga's (2021) assertion that LAC plays a pivotal role in equipping teachers to meet the challenges of globalization by fostering well-rounded learner development.

The lowest-rated item was statement nine: "*Provide remedial instruction for those who are experiencing difficulties in learning lessons*" with a mean score of 3.76. Although this rating still reflects a positive interpretation, its comparatively lower value suggests that remediation, while acknowledged, may not be consistently emphasized during LAC discussions. Lawani (2018) has argued that addressing individual learning needs, particularly those of struggling students, is a hallmark of effective teaching. This finding therefore points to a possible gap in translating professional learning into targeted instructional support.

Overall, the data indicate that teachers at Lapogan Integrated School highly value LAC implementation in strengthening their awareness and practices related to learner diversity and inclusion. Teachers described LAC sessions as spaces where inclusion is openly discussed. One respondent noted, "*We talk about how to adjust lessons when students have different needs.*" Another explained, "*LAC helped me see that every learner has a different background, and I need to consider that in my teaching.*"

However, several participants admitted that remedial instruction is not always explored in depth. As one teacher shared, "*We mention remediation, but we do not always plan specific steps.*" These qualitative insights align with the high quantitative ratings on inclusion, while also clarifying why remedial instruction received a slightly lower mean score. In essence, while inclusion is strongly embedded in LAC practices, the operationalization of remediation remains an area for further development. The lowest-rated item is statement nine: "*Provide remedial instruction for those who are experiencing difficulties in learning lessons*" at 3.76. Although still interpreted positively, the relatively lower score suggests that while remediation is acknowledged, it may not be as consistently practiced or emphasized during LAC discussions. Lawani asserted that addressing individual learning needs, especially for struggling students, is an indicator of effective teaching. This area could indicate a gap in translating professional learning into targeted instructional support.

The consistency in high scores supports the studies of Silva (2018) and Gonzalez (1986), that teacher development is a key mechanism for improving student experiences. While teachers affirm that LAC sessions are effective in building inclusive competencies, slight variations—particularly in providing remedial support—highlight possible areas of improvement.

### b. Lesson Content and Pedagogy

**Table 8**  
**Weighted Mean and Qualitative Description of the Respondents' Assessment of LAC Implementation in Terms of Lesson Content and Pedagogy**

Statement	Weighted Mean	Qualitative Description
1. Study and analyze the Kto12 Curriculum	3.95	To a Great Extent
2. Prepare for lessons and be more relaxed in executing lesson plans	3.96	To a Great Extent
3. Implement developmentally appropriate teaching methods that respect the individual differences of the learners	3.96	To a Great Extent
4. Jointly craft learning goals in collaboration with their learner	3.93	To a Great Extent
5. Master content and performance standards and learning competencies	3.95	To a Great Extent
6. Plan lessons and deliver instructions effectively	3.97	To a Great Extent
7. Assess the learning that resulted from their teaching	3.95	To a Great Extent
8. Plan weekly lessons during the LAC that can be implemented for a specified period	3.91	To a Great Extent
9. Share their experience to improve subsequent lesson	3.93	To a Great Extent
10. Translate curriculum content into relevant learning activities.	3.96	To a Great Extent
Overall Weighted Mean	3.95	To a Great Extent

Table 8 presents the weighted mean and qualitative description of respondents' assessment of LAC implementation in terms of lesson content and pedagogy. As shown, all statements were rated "To a Great Extent", with an overall mean of 3.95, reflecting strong consensus among respondents that LAC sessions substantially support both pedagogical and content-related practices.

The highest mean score was recorded in planning lessons and deliver instructions effectively, with a mean of 3.97. This high rating for lesson planning may be attributed to the practical orientation of LAC sessions. Teachers noted that collaborative planning reduces uncertainty in lesson delivery and enhances preparedness. Through planning discussions, teachers are able to clarify objectives, anticipate learner difficulties, and align instruction with curriculum standards. These factors likely explain why lesson planning and delivery emerged as the most highly rated aspect during the study.

The results suggest that teachers perceive LAC discussions as instrumental in enhancing both the clarity and organization of their instructional practices. This observation relates with Bates and Morgan's (2018) that well-designed professional development initiatives directly strengthen instructional competence. Similarly, De Vera et al. (2020) underscored that active participation in LAC sessions enables teachers to refine delivery strategies, thereby contributing to improved pedagogical outcomes. The planning of weekly lessons during LAC sessions garnered the lowest mean score of 3.91. Although this rating remains relatively high, the slight decline may reflect inconsistencies in the extent to which this practice is systematically adopted across LAC groups. As Marquardt (2019) emphasized, effective collaborative planning requires disciplined cycles and deliberate facilitation, conditions that may not be uniformly sustained within all teacher communities.

Results of the interview with teachers highlight that teachers place strong value on collaborative lesson planning. One teacher explained, "*When we meet in LAC, we compare lesson plans and adjust them before teaching.*" Another respondent noted, "*I feel more confident delivering lessons after discussing them with my group.*" These statements reinforce the high overall mean scores in lesson content and pedagogy, as teachers reported greater clarity in both planning and delivery. However, several participants acknowledged that weekly lesson planning in LAC does not always occur due to time constraints. This observation corresponds with the slightly lower rating of that item in the quantitative results.

The findings reveal that teachers of Integrated School of Tumauni view LAC sessions as highly beneficial in improving lesson content and pedagogical practices. The high overall rating confirms that LACs contribute meaningfully to content mastery, lesson preparation, and instructional effectiveness. Teachers find value in collaborative planning, reflective practice, and alignment with curriculum standards.

These results confirm earlier findings from Jackaria & Caballes (2022), that LAC sessions help teachers manage instructional challenges and respond effectively to the needs of 21st-century classrooms.

### c. Assessment and Reporting

**Table 9**  
**Weighted Mean and Qualitative Description of the Respondents' Assessment of LAC Implementation in Terms of Assessment and Reporting**

Statement	Weighted Mean	Interpretation
1. Implement the learner-centered assessment policies for the Kto12 Curriculum	3.91	To a Great Extent
2. Include ways to assess the learners during LAC sessions data from formative assessment to devise interventions	3.86	To a Great Extent
3. Conduct an assessment that provides teachers and learners with the necessary feedback about learning outcomes	3.92	To a Great Extent
4. Selects, organizes, and uses sound assessment continuously	3.93	To a Great Extent
5. Measure their effectiveness based on learners' results	3.92	To a Great Extent
6. Use learners' output as evidence to improve professional practice	3.96	To a Great Extent
7. Set target on desired learners' progress	3.93	To a Great Extent
8. Identify the evidence needed to show learners understanding	3.95	To a Great Extent
Overall Weighted Mean	3.92	To a Great Extent

Table 9 presents the teachers' evaluation of the implementation of Learning Action Cell (LAC) sessions with respect to assessment and reporting practices. The table comprises eight statements that emphasize the integration of assessment tools, learner-centered policies, feedback mechanisms, and target setting within the instructional process. Each item was rated on a four-point scale, with all statements consistently interpreted as "To a Great Extent." The computed overall mean of 3.92 suggests that respondents strongly affirm the effectiveness of assessment-related practices during LAC sessions.

The highest-rated statement is on the use of learners' output as evidence to improve professional practice, which received a mean of 3.96. This suggests that teachers recognize the value of student work as a basis for reflecting on and refining their teaching. The result is similar to Campbell (2020) findings that LACs are meant to enhance both content and assessment practices. It also reflects the view of Culajara (2022), who emphasized that teachers must be capable of adapting instruction in response to evidence of student learning.

The lowest-rated item, although still rated as “To a Great Extent,” is Item 2, “*Include ways to assess the learners during LAC sessions using data from formative assessment to devise interventions*”, with a mean of 3.86. This may suggest some inconsistency in how teachers integrate formative assessment discussions into LAC planning or that interventions are not always derived directly from such assessments. According to Bryk, et al(2015) improvement in science in education emphasizes frequent data use for instructional decision-making, an area that could be strengthened further within the LAC process.

The positive ratings in Table 2.c suggest that teachers believe that LAC sessions strengthen their assessment skills, yet the findings of Heritage (2007) show that many teachers often struggle to interpret assessment evidence with accuracy and consistency. Her analysis highlights that teachers sometimes feel confident with assessment practices even when gaps remain in their ability to use formative data for targeted instructional action, which contrasts with the uniformly high means in this study.

Moreover, in an interview with teachers, they acknowledged that LAC discussions include assessment practices. One respondent stated, “*We check test results together and talk about what to improve.*” Another said, “*Student output helps me decide what to reteach.*” Despite this, a few teachers noted that formative data are not always analyzed thoroughly. A participant shared, “*Sometimes we focus more on teaching strategies than on assessment data.*” These statements explain the strong overall rating in assessment and reporting, while also clarifying the relatively lower mean for formative assessment use in intervention planning.

Overall, the results affirm that assessment and reporting are actively discussed and meaningfully applied as part of the LAC experience. However, although assessment practices were rated highly, the relatively lower mean in using formative assessment data suggests that teachers may still rely more on summative results rather than systematic formative analysis. Informal sharing during the conduct of the study revealed that while teachers collect assessment data, structured interpretation and intervention planning are not always consistently documented. This indicates a need to strengthen the use of evidence-based decision making within LAC sessions.

**d. Curriculum Contextualization, Localization and Indigenization.**

**Table 10**  
**Weighted Mean and Qualitative Description of the Respondents’ Assessment of LAC Implementation in Terms of Curriculum Contextualization, Localization and Indigenization**

Statement	Weighed Mean	Qualitative Description
1. Match the curriculum content and instructional strategies relevant to teachers	3.96	To a Great Extent

2. Identify and respond to opportunities to link teaching and learning in the classroom to the experiences, interests, and aspirations of the wider school community and other key stakeholders	3.93	To a Great Extent
3. Link new content to the local experiences that are familiar to learners to make learning more efficient and relevant	3.95	To a Great Extent
4. Modify the teacher's guide and learners' materials to accommodate the unique contexts of a particular locality	3.96	To a Great Extent
5. Prepare curricula materials suited to the cultural and social context in which they teach, actively	3.95	To a Great Extent
6. Recognize that the K to 12 Curriculum is learner-centered, inclusive, and research-based	3.96	To a Great Extent
7. Realize that the K to 12 Curriculum is flexible, ICT based and global	3.97	To a Great Extent
8. Make sure that the members of the community participate in indigenization processes so that the curriculum will be accurate and faithful to the culture in consideration	3.91	To a Great Extent

Table 10 presents the assessment of teachers on how Learning Action Cell (LAC) sessions support curriculum contextualization, localization, and indigenization.

As seen in the results, all statements are rated "To a Great Extent", with an overall mean of 3.95 and a standard deviation of 0.17. This reflects strong agreement that LAC sessions meaningfully contribute to adapting the curriculum to local contexts and cultural realities.

The highest-rated item is on the statement, "*Realize that the K to 12 Curriculum is flexible, ICT-based and global*", with a mean of 3.97. This suggests that teachers are confident in integrating flexible and globally aligned elements of the curriculum into their instruction. This affirms the relevance of LAC discussions in helping teachers adapt to 21st-century demands, as emphasized in Silva's (2018) study which highlighted LAC's influence in modernizing instructional methods and perspectives.

The lowest-rated item, although still falling under “To a Great Extent,” is on the statement, *“Make sure that the members of the community participate in indigenization processes...”* with a mean of 3.91. This indicates that while teachers understand the importance of community involvement in indigenization, practical participation might be limited or inconsistent. According to Chavez (2018), true contextualization includes active community input and not just teacher-led adjustments.

Moreover, teachers reported that LAC sessions help them connect lessons to local experiences. One respondent stated, *“We try to use examples from our community so students understand better.”* Another teacher explained, *“I modify materials to match the culture of our learners.”* However, community involvement in indigenization appears limited. A participant admitted saying, *“We do not always invite community members to give input.”* These responses support the high quantitative ratings while explaining the slightly lower score for community participation.

Overall, the results affirm that LAC sessions support teachers in aligning curriculum delivery with local culture, experiences, and learner contexts. The high overall mean of 3.95 reflects a shared understanding among teachers that curriculum work should be relevant and grounded in their communities. These findings are supported by Campbell (2020) who emphasized that LACs enhance teachers’ capacity to apply contextual teaching methods. The consistently high ratings indicate that LACs provide a practical platform for teachers to interpret and implement the K to 12 curricula in a way that respects cultural diversity and social relevance.

**Table 11**  
**Overall Summary of LAC Implementation**

Area	Overall Mean	Interpretation
Learner Diversity	3.89	To a Great Extent
Lesson Content	3.95	To a Great Extent
Assessment	3.92	To a Great Extent
Curriculum Contextualization	3.95	To a Great Extent

Table 11 presents the overall summary of LAC implementation across the four major areas. All domains obtained overall means ranging from 3.89 to 3.95, interpreted as “To a Great Extent.”

Lesson Content and Curriculum Contextualization both recorded the highest overall mean of 3.95, indicating that teachers are highly engaged in collaborative lesson planning and in tailoring instructional materials to fit the local context. Assessment followed closely with a mean of 3.92, reflecting consistent discussions on evaluation practices and student progress monitoring during LAC sessions. Meanwhile, Learner Diversity obtained a mean of 3.89, which still indicates strong implementation but

suggests that differentiated instruction and remediation strategies may benefit from further enhancement.

Overall, the findings show that LAC is well implemented in the participating schools.. The consistently high ratings across all domains indicate that teachers perceived LAC as an active and functional professional development mechanism within their school setting.

**3. How does the Faculty Development Program of DepEd Isabela affect the teachers in terms of:**

**a. Knowledge and Skills**

**Table 12**  
**Weighted Mean and Qualitative Description of the Effect of Faculty Development Program of DepEd Isabela on Teachers in Terms of Knowledge and Skills**

The LAC has affected my Knowledge and Skills through:	Weighed Mean	Qualitative Description
1. Acquisition of additional knowledge about the subjects I'm teaching.	3.95	Very Effective
2. Development of pedagogical competencies in teaching.	3.93	Very Effective
3. Realization of the importance of upgrading teaching skills.	3.95	Very Effective
4. Utilization of innovative activities for my pupils' better learning.	3.92	Very Effective
5. Integration of relevant skills and concepts in all my lessons.	3.96	Very Effective
Overall Weighted Mean	3.94	Very Effective

Table 12 presents the respondents' assessment of the Department of Education (DepEd) Isabela's professional development program, specifically implemented through Learning Action Cell (LAC) sessions, and its impact on their knowledge and skills. The overall mean score of 3.94 with a standard deviation of 0.23 suggests that teachers perceive the LAC-based professional development program as highly effective in strengthening their professional competencies. Notably, the highest-rated item is on the statement, "Integration of relevant skills and concepts in all my lessons," which obtained a mean score of 3.96, highlighting the program's strong influence on instructional practice.

This indicates that teachers are consistently integrating newly acquired knowledge into their instructional practices. The findings reinforce what Bates and Morgan (2018) argued that well-executed professional development helps teachers integrate relevant and timely knowledge into their actual classroom instruction. It also aligns with Campbell's (2020) that LAC sessions are designed to enhance both knowledge and application.

The lowest-rated item on utilization of innovative activities for pupils' better learning received a mean score of 3.92. While this rating still falls within the category of "very

effective,” its comparatively lower value highlights an opportunity for further development in adopting more creative and adaptive instructional strategies. This finding resonates with Lawani’s (2018) observation that although training can strengthen teachers’ knowledge, the successful integration of innovative practices often hinges on access to adequate resources, supportive peer networks, and the confidence to experiment with new approaches.

The high ratings in Table 12 suggest that teachers view the LAC-based professional development program as highly effective for strengthening knowledge and skills. In the interview conducted, teachers expressed that LAC sessions expanded their teaching knowledge. One respondent said that she has gained new ideas which she immediately applied in class. Another shared, that she has improved her teaching skills because of the strategies discussed in LAC. These statements support the “Very Effective” rating in knowledge and skills. Teachers described practical changes in classroom instruction after each session.

However, Opfer and Pedder (2011) found that teacher learning does not always improve through professional development because its effectiveness depends on complex interactions among school conditions, teacher beliefs, and actual classroom constraints, which challenges the uniformly strong perceptions in the present results.

### b. Attitudes and Values

**Table 13**  
**Weighted Mean and Qualitative Description of the Effect of Faculty Development Program of DepEd Isabela on Teachers in Terms of Attitudes and Values**

The LAC has affected my Attitudes and Values through:	Weighed Mean	Qualitative Description
1. Appreciation of my profession as a noble work.	3.99	Very Effective
2. Consciousness of my duties and responsibilities in and out of the classroom.	3.97	Very Effective
3. Lessons made more creative, interesting, and value-oriented.	3.96	Very Effective
4. Treatment of the rich and poor pupils is equal.	3.95	Very Effective
5. I started evaluating myself as a teacher and as a person.	3.97	Very Effective
Overall Weighted Mean	3.97	Very Effective

Table 13 shows the teachers’ assessment of the Learning Action Cell (LAC) as part of the Faculty Development Program of DepEd Isabela in terms of how it shaped their attitudes and values.

As seen in the results, the overall mean is 3.97 with a standard deviation of 0.15, is interpreted as “Very Effective.” This suggests that teachers believe that LAC sessions have significantly helped develop not just their teaching abilities but also their mindset, behavior, and ethical standards related to their professional responsibilities.

The highest-rated item is on the statement “Appreciation of my profession as a noble work,” with a mean of 3.99. Teachers strongly agreed that the LAC sessions reinforced their commitment to their profession and affirmed the value of their work. This is consistent with the view of Sergiovanni (2015) that personal growth begins with a renewed sense of mission. The idea that teaching is a noble vocation aligns with the reflection shared in the study, which described the profession as measured not in external recognition but in the daily impact on students’ lives (Ntshangase, 2021).

The lowest-rated item, although still in the “Very Effective” range, is the statement, “*Treatment of the rich and poor pupils is equal,*” with a mean of 3.95. While teachers agreed with this statement, its slightly lower score hints at lingering challenges in fully implementing inclusive and equitable practices. Lawani (2018) pointed out that disparities in learner backgrounds can be difficult to neutralize without targeted support, even with professional development. Nevertheless, the high rating implies that LAC sessions helped raise awareness of equity in the classroom.

Moreover, participants described a renewed sense of commitment to teaching. One teacher stated, “*LAC reminds me why I chose this profession.*” Another shared, “*I became more conscious of my responsibilities inside and outside the classroom.*” These insights align with the high ratings in attitudes and values. Teachers emphasized professional identity and fairness in dealing with learners.

These results are supported by the implementation of DepEd Orders No. 35, s. 2016 and No. 42, s. 2017, which mandate that continuing teacher development should include values formation and professional conduct aligned with the Philippine Professional Standards for Teachers (PPST). Moreover, Wenger (2018) argued that professional learning communities like LACs influence not only the technical side of teaching but also the social and ethical dimensions.

Overall, the data show that the LAC sessions under the Faculty Development Program of DepEd Isabela are very effective in strengthening teachers’ professional attitudes and values, with an overall mean of 3.97. Teachers developed a renewed appreciation for their profession, greater awareness of their duties, and stronger self-reflection. Lessons became more engaging and value-laden, and a stronger sense of fairness toward learners from different backgrounds emerged. These findings reflect the continuing professional development goals emphasized in RA 10533 and DepEd policies promoting teacher growth. The results also affirm the insights of Chavez (2018) and Culajara (2022), that LAC is an initiative that supports both technical and character development among educators.

### c. Perceptions of their Role

**Table 14**  
**Weighted Mean and Qualitative Description of the Effect of Faculty Development Program of DepEd Isabela on Teachers in Terms of Perceptions of their Role**

The LAC has affected my Perceptions of Role by:	Weighed Mean	Qualitative Description
1. Becoming conscious of my important role as an educator in the transformation of our society.	3.99	Very Effective
2. Becoming sensitive to the fact that the teacher's role in the classroom is more a facilitator than a lecturer.	3.97	Very Effective
3. Learning more modeling as the best teaching aid.	3.97	Very Effective
4. Realization of the importance of keeping abreast with current issues and practices in education.	3.97	Very Effective
5. Realization of the values of active participation and collective efforts in achieving a goal.	3.97	Very Effective
Overall Weighted Mean	3.98	Very Effective

Table 14 shows how teachers assessed the impact of the Learning Action Cell (LAC) on their perception of their professional responsibilities.

As seen in the results, the overall mean is 3.98 with a standard deviation of 0.13, which falls under "Very Effective". This suggests that the respondents strongly agree that the LAC influenced how they understand and value their professional function.

The highest mean score is on the statement, "*Becoming conscious of my important role as an educator in the transformation of our society*", with a mean of 3.99. Teachers highly recognized their part in societal transformation, not only within the classroom but also beyond. This reflects the goals stated in RA 10533 and DepEd Order No. 35, s. 2016, which emphasize preparing educators as agents of social impact. The result aligns with Sergiovanni (2015) concept that educators must view their function through a moral and developmental lens, where transformation happens through commitment to one's work.

All statements were rated "Very Effective", showing strong agreement and consistency among teachers. These results reflect the effectiveness of DepEd's use of LACs as platforms for developing reflective, collaborative, and socially responsible educators. Teachers claim that LAC sessions influenced how they view their work. One respondent explained that she now see herself as a guide, not just someone who gives lectures. Another shared that LAC discussions remind them that teaching impacts society. These statements correspond with the high overall mean in perception of professional responsibilities.

Overall, the findings indicate that teachers from DepEd Isabela perceived the LAC sessions as very effective in reshaping their understanding of their professional responsibilities. With an overall mean of 3.98, teachers affirmed their influence in societal transformation, recognized the value of being facilitators of learning, appreciated modeling, and emphasized collaboration and awareness of current educational practices.

#### d. Methodology and Strategies in Teaching

**Table 15**  
**Weighted Mean and Qualitative Description of the Effect of Faculty Development Program of DepEd Isabela on Teachers in Terms of Methodology and Strategies in Teaching**

The LAC has affected my Methodology and Strategies in teaching in terms of:	Weighed Mean	Qualitative Description
1. Learning a variety of useful teaching techniques and strategies.	3.96	Very Effective
2. Applying whatever I can in my classroom teaching.	4.00	Very Effective
3. Developing confidence in preparing my teaching materials.	3.99	Very Effective
4. Initiation of replacing my old teaching materials and techniques with more relevant and facultative ones.	3.97	Very Effective
5. Improvement of my teaching strategies and materials.	3.99	Very Effective
<b>Overall Weighted Mean</b>	<b>3.98</b>	<b>Very Effective</b>

Table 15 presents the assessment of teachers from DepEd Isabela on how the Learning Action Cell (LAC) influenced their methodology and strategies in teaching.

The overall mean of 3.98 indicates that the LAC Sessions are “Very Effective”. This shows that the respondents strongly agree that the LAC had a meaningful effect on the way they teach and, on their readiness, to adapt and innovate in their instruction.

The highest-rated item is on the statement, “*Applying whatever I can in my classroom teaching,*” with a perfect mean of 4.00. This implies that teachers not only learned new strategies but actually used them in real classroom settings. This validates the principle in DepEd Order No. 35, s. 2016, that professional development must translate into classroom application. It also affirms the findings of Bantugan (2018), who stated that training becomes meaningful only when teaching strategies are translated into effective delivery.

The lowest-rated item, though still rated “Very Effective,” is the statement, “*Learning a variety of useful teaching techniques and strategies,*” with a mean of 3.96. While teachers acknowledged learning new methods, the higher variability suggests that not all teachers experienced the same level of growth in this area. This result may reflect differences in session content or facilitation quality. Tanner and Tanner (2007) emphasized that effective faculty development must be tailored to meet individual learning needs, or its impact will vary across participants.

Teachers reported concrete changes in classroom practices. One respondent said, “*I replaced some of my old materials after our LAC session.*” Another shared, “*I try new strategies that we discussed as a group.*” These comments support the high ratings in methodology and teaching strategies. Teachers described direct application of learning from LAC meetings.

Overall, the data indicate that the Learning Action Cell sessions are very effective in enhancing teachers’ methodology and teaching strategies. With an overall mean of 3.98, teachers reported improvements in applying strategies, confidence in planning instruction, and a willingness to move away from outdated methods. These findings reflect the objectives of DepEd Orders and international teaching standards, affirming that collaborative, teacher-driven professional development contributes to improved classroom instruction.

The results show that LAC as a professional development strategy benefits teachers in four major ways. First, in terms of knowledge and skills, teachers reported improved content mastery and application of strategies. Second, in attitudes and values, teachers developed stronger appreciation of their profession and ethical awareness. Third, in perceptions of their role, teachers viewed themselves more as facilitators and contributors to societal development. Fourth, in methodology and strategies, teachers reported increased confidence and willingness to adopt improved instructional approaches.

**4. Does the effect of professional development program on the teacher-respondents significantly differ when grouped according to their profile?**

**a. Knowledge and skills**

**Table 16**  
**Results of the Test of Significant Difference in the Effect of the Faculty Development Program on the Teacher-Respondents in Terms of Knowledge and Skills When Grouped According to Their Profile Variables**

Variable	Profile	p-value	Analysis	Decision	Remarks
Knowledge and skills	Age	0.477	$p > 0.05$	Accept $H_0$	Not significant
	Sex	0..909	$p > 0.05$	Accept $H_0$	Not significant
	Civil Status	0.342	$p > 0.05$	Accept $H_0$	Not significant

	Designation	0.757	$p > 0.05$	Accept $H_0$	Not significant
	Length of Tenure	0.849	$p > 0.05$	Accept $H_0$	Not significant
	Highest Educational Attainment	0.842	$p > 0.05$	Accept $H_0$	Not significant

Table 16 presents the results of the test of significant difference in the effect of the professional development program (LAC) on the teacher-respondents in terms of knowledge and skills when grouped according to their profile variables. The non-parametric independent t-test (Mann-Whitney U test) was used for sex, while the non-parametric one-way ANOVA (Kruskal-Wallis H test) was employed for age, civil status, designation, length of Tenure, and highest educational attainment, which all have more than two group categories. All tests were conducted at the 0.05 level of significance.

The results show that all p-values obtained were greater than 0.05. These lead to the acceptance of the null hypotheses at this level of significance. This means that the effect of the professional development program on the respondents' knowledge and skills does not significantly differ when grouped according to age, sex, civil status, designation, length of tenure, and highest educational attainment.

Interview responses support the statistical finding that knowledge and skills improved similarly across groups. Teachers from different age brackets shared comparable experiences. A younger teacher stated, "Even if I am new, I learned strategies that I could apply right away." A senior teacher explained, "The sessions helped me update my teaching methods." Male and female respondents also described similar gains. One participant said, "The content of the LAC benefits everyone, regardless of position." These statements align with the non-significant results across profile variables. Teachers perceived the professional development program as relevant to all participants, regardless of age, designation, or educational attainment.

This indicates that the level of knowledge and skills gained from the professional development program is consistent across teacher-respondents, regardless of their demographic or professional characteristics. In other words, the program appears to have provided a uniform level of benefit to teachers across different groups. The absence of significant differences across groups suggests that the program influenced teachers in a uniform way. However, Garet et al. (2001) found that teacher learning often varies across demographic and professional characteristics, which contrasts with the consistent effects reported in this table.

**b. Attitudes and Values**

**Table 17**  
**Results of the Test of Significant Difference in the Effect of the Faculty Development Program on the Teacher-Respondents in Terms of Attitudes and Values When Grouped According to Their Profile Variables**

Variable	Profile	p-value	Analysis	Decision	Remarks
Attitudes and Values	Age	0.312	$p > 0.05$	Accept $H_0$	Not significant
	Sex	0.341	$p > 0.05$	Accept $H_0$	Not significant
	Civil Status	0.188	$p > 0.05$	Accept $H_0$	Not significant
	Designation	0.455	$p > 0.05$	Accept $H_0$	Not significant
	Length of Tenure	0.378	$p > 0.05$	Accept $H_0$	Not significant
	Highest Educational Attainment	0.871	$p > 0.05$	Accept $H_0$	Not significant

Table 17 presents the results of the test of significant differences in the effect of the professional development program (LAC) on teacher-respondents' attitudes and values when grouped according to their profile variables. The non-parametric independent t-test (Mann–Whitney U test) was applied for sex, while the non-parametric one-way ANOVA (Kruskal–Wallis H test) was employed for age, civil status, designation, length of tenure, and highest educational attainment, as these variables have more than two categories. All tests were conducted at the 0.05 level of significance. The findings reveal that all p-values obtained across the profile variables exceeded the 0.05 threshold, leading to the acceptance of the null hypotheses. This indicates that none of the demographic factors examined—namely age, sex, civil status, designation, length of tenure, and highest educational attainment—exerted a statistically significant influence on the teacher-respondents' attitudes and values. after participating in the professional development program.

Teachers across different civil status, years of tenure, and academic qualifications expressed similar shifts in mindset. A married teacher remarked, "*LAC reminds me of my responsibility not only to students but also to the school.*" A younger teacher shared, "*It made me appreciate teaching more.*" Respondents described increased awareness of professional conduct and fairness in dealing with learners. These narratives support the statistical finding that attitudes and values did not significantly differ across profile categories. Teachers conveyed a shared sense of professional commitment after participating in LAC sessions.

The non-significant results imply that teachers have similar attitudes and values regardless of their profile. However, Day and Gu (2007) showed that teachers' professional attitudes usually shift in different ways depending on age, experience, and career stage, which contrasts with the uniform outcomes seen in this table.

Yet this further implies that the professional development program had a consistent and equal impact on the teachers' attitudes and values regardless of their background or profile characteristics. This means that improvements in areas such as appreciating the teaching profession, being conscious of responsibilities, making creative and value-oriented lessons, treating learners fairly, and engaging in self-reflection were experienced similarly by all teachers.

### c. Perceptions of their Role

**Table 18**  
**Results of the Test of Significant Difference in the Effect of the Faculty Development Program on the Teacher-Respondents in Terms of their Perceptions of their Role When Grouped According to Their Profile Variables**

Variable	Profile	p-value	Analysis	Decision	Remarks
Perceptions of Their Role	Age	0.158	$p > 0.05$	Accept $H_0$	Not significant
	Sex	0.416	$p > 0.05$	Accept $H_0$	Not significant
	Civil Status	0.706	$p > 0.05$	Accept $H_0$	Not significant
	Designation	0.421	$p > 0.05$	Accept $H_0$	Not significant
	Length of Tenure	0.155	$p > 0.05$	Accept $H_0$	Not significant
	Highest Educational Attainment	0.952	$p > 0.05$	Accept $H_0$	Not significant

Table 18 presents the results of the test of significant differences in the effect of the professional development program (LAC) on teacher-respondents' role perception when grouped according to their profile variables. For sex, the non-parametric independent t-test (Mann–Whitney U test) was applied, while the non-parametric one-way ANOVA (Kruskal–Wallis H test) was used for variables with more than two categories, namely age, civil status, designation, length of tenure, and highest educational attainment. All statistical tests were conducted at the 0.05 level of significance.

The statistical analysis reveals that all p-values exceeded the 0.05 threshold, thereby supporting the acceptance of the null hypotheses at the specified level of significance. This outcome indicates that no statistically significant differences exist in respondents' perceptions of their professional role across the examined profile variables. In other words, regardless of demographic characteristics such as age, designation,

academic degree, or years of experience, teachers expressed comparable views regarding their responsibilities following participation in the professional development program.

Qualitative responses reinforced this finding. Teachers consistently articulated a shared understanding of their professional role, emphasizing guidance and societal impact rather than mere instructional delivery. For instance, one participant reflected, “*I see myself as someone who guides students, not just someone who delivers lessons.*” Another noted, “*LAC discussions remind us that teaching influences the future of society.*” These statements illustrate a collective orientation toward teaching as a transformative and socially consequential practice. Importantly, no discernible differences emerged in perceptions based on demographic distinctions, further corroborating the quantitative results.

This convergence of evidence suggests that the professional development program fostered a relatively uniform impact on teachers’ role perceptions, effectively addressing the needs of diverse groups within the faculty (Tanner & Tanner, 2007; Bryk et al., 2015). While Kelchtermans (2009) has argued that teachers’ role conceptions often evolve in response to contextual factors, personal histories, and career trajectories, the present findings diverge from this perspective by demonstrating notable consistency across demographic categories. Such uniformity implies that the program succeeded in cultivating a shared professional identity, thereby strengthening teachers’ collective sense of responsibility within the school setting.

#### d. Methodology and Strategies in Teaching

**Table 19**  
**Results of the Test of Significant Difference in the Effect of the Faculty Development Program on the Teacher-Respondents in Terms of Methodology and Strategies in Teaching When Grouped According to Their Profile Variables**

Variable	Profile	p-value	Analysis	Decision	Remarks
Methodology and Teaching Strategies	Age	0.143	$p > 0.05$	Accept $H_0$	Not significant
	Sex	0.416	$p > 0.05$	Accept $H_0$	Not significant
	Civil Status	0.706	$p > 0.05$	Accept $H_0$	Not significant
	Designation	0.400	$p > 0.05$	Accept $H_0$	Not significant
	Length of Tenure	0.161	$p > 0.05$	Accept $H_0$	Not significant
	Highest Educational Attainment	0.947	$p > 0.05$	Accept $H_0$	Not significant

Table 19 reveals the results of the test of significant difference in the effect of the professional development program on the teacher-respondents in terms of methodology and strategies in teaching when grouped according to their profile variables. The non-parametric independent t-test (Mann-Whitney U test) was used for sex, while the non-parametric one-way ANOVA (Kruskal-Wallis H test) was employed for age, civil status, designation, length of service, and highest educational attainment, which all have more than two group categories. All tests were conducted at the 0.05 level of significance.

As shown in the table, all p-values for the effects of the professional development program on methodology and teaching strategies across the profile variables exceeded the 0.05 level of significance. This indicates that none of the demographic factors exerted a significant influence on the teacher respondents' instructional methods and strategies after participating in the program. In other words, teachers demonstrated comparable improvements in the application of teaching methods and strategies, regardless of their age, designation, or tenure. This across all groups of teachers, and its impact on instructional practices was independent of personal or professional characteristics.

Teachers from varying service lengths and academic backgrounds reported comparable improvements in instructional practices. For instance, a Master Teacher reflected, *"I adjusted some of my strategies after our LAC session,"* while a Teacher I respondent noted, *"I tried new activities that we discussed."* Both senior and junior teachers described meaningful changes in lesson delivery and classroom management. These accounts reinforce the statistical results, which revealed no significant differences across profile variables, indicating that teachers demonstrated similar patterns of instructional adjustment regardless of background characteristics.

The findings therefore suggest that improvements in methodology and teaching strategies were consistent across groups, despite differences in professional profile. Interestingly, this contrasts with Desimone's observation that professional development often affects teachers unevenly, as individual needs and contexts typically shape how new strategies are adopted. In this case, however, the program's influence appeared uniformly distributed, underscoring its broad applicability and effectiveness across diverse teacher groups.

### 5. What are the problems and challenges encountered by the teacher -respondents during school learning action cell?

**Table 20**  
**Weighted Mean and Qualitative Description of the Problems and Challenges Encountered by the Teacher -respondents During School Learning Action Cell**

Problems and Challenges	Weighted Mean	Qualitative Description
1. Schedule of the School Learning Action Cell.	2.51	Serious
2. Overlapping of Activities	2.82	Serious
3. Availability of Electricity.	2.58	Serious

4. Lack of Learning Resources	2.61	Serious
5. Teacher's Lack of Training	2.57	Serious
6. Poor Learning Environment.	2.32	Moderately Serious
7. Lack of space for grouping	2.20	Moderately Serious
8. Facilitative skills of Facilitator	2.45	Moderately Serious
9. Negative Attitude of Teachers	2.05	Moderately Serious
10. Irregular Supervision and Monitoring	2.30	Moderately Serious
11. Curriculum Content	2.54	Serious
12. Non-adherence to Policies and Guidelines	1.89	Moderately Serious
<b>Overall Weighted Mean</b>	<b>2.40</b>	<b>Moderately Serious</b>

The weighted mean and qualitative descriptions of the problems and challenges encountered by the teacher-respondents during the School Learning Action Cell are shown in Table 20.

The results show that several issues were rated as Serious, including the schedule of the School Learning Action Cell, overlapping activities, availability of electricity, lack of learning resources, teacher's lack of training, and concerns related to curriculum content. Meanwhile, challenges that are considered Moderately Serious include the poor learning environment, insufficient space for group work, facilitative skills of the facilitator, negative attitude of teachers, irregular supervision and monitoring, and non-adherence to policies and guidelines. Although these concerns are not deemed severe, they still represent important areas for improvement to strengthen the overall implementation of the School Learning Action Cell.

Interview responses provide context to the challenges identified in the quantitative findings. Teachers frequently mentioned schedule conflicts. One respondent said, "LAC sessions sometimes overlap with other school activities." Another noted, "We lack enough materials for group discussion." Several teachers raised concerns about electricity interruptions and limited space. A participant stated, "When there is no power, our discussion becomes limited." Despite these concerns, teachers expressed continued willingness to participate. One teacher shared, "Even if there are problems, LAC still helps us improve."

Although the previous section highlighted the substantial progress in LAC implementation, several operational challenges were still rated as serious. These findings do not undermine the overall positive outcomes. Teachers appear to value the professional learning process while simultaneously recognizing logistical constraints. Informal observations during the study revealed that teachers continue to participate despite scheduling conflicts and limited resources, largely because they perceive LAC as beneficial. This indicates that teachers actively find ways to navigate these challenges while sustaining implementation. In practice, they address difficulties through

collaborative adjustments and administrative coordination, ensuring that the initiative remains viable and impactful.

The overall weighted mean of 2.40, interpreted as Moderately Serious, indicates that while the School Learning Action Cell (LAC) program encounters operational difficulties, these are not regarded as critical barriers to participation. Findings from Darling-Hammond et al. highlight that lack of time, limited resources, and weak facilitation often pose significant obstacles in professional learning communities. In contrast, the relatively moderate severity reported in this study suggests that teachers maintain a constructive outlook toward LAC despite such constraints. This resilience reflects a shared sense of responsibility among participants, who continue to engage in the program and collaboratively address challenges throughout its implementation.

## 6. What are the Intervention Programs to Institutionalize Learning Action Cell?

**Table 21**  
**Proposed Intervention Plan to Institutionalize Learning Action Cell (LAC)**

<b>Problem Identified</b>	<b>Objective</b>	<b>Key Actions</b>	<b>Persons Involved</b>	<b>Time Frame</b>	<b>Success Indicator</b>
Schedule of LAC	Establish fixed and protected LAC schedules	Designate official LAC days in school calendar; issue formal memo; prohibit overlapping activities on LAC dates	School Head, Academic Head, LAC Coordinator	Beginning of school year; monitored quarterly	100% of scheduled LAC sessions conducted as planned
Overlapping of Activities	Improve school-wide coordination of activities	Develop centralized annual activity map; conduct pre-calendar alignment meeting; monitor compliance	School Head, Department Heads, Planning Committee	Annual planning period; reviewed quarterly	Reduced reports of schedule conflict; improved attendance
Availability of Electricity	Ensure continuity of LAC sessions despite power interruptions	Identify alternative venues with generator access; prepare	School Head, Property Custodian, LAC Coordinator	Ongoing; as needed	No cancellation of LAC due to power interruption

		printed backup materials; adjust schedule if needed			
Lack of Learning Resources	Strengthen availability of instructional and reference materials	Allocate modest LAC budget; create shared digital and printed resource repository; encourage departmental resource pooling	School Head, Finance Officer, Department Heads	Start of school year; updated quarterly	Increased availability of lesson exemplars and reference materials
Teacher Lack of Training	Improve facilitator and teacher competence in LAC processes	Conduct regular capacity-building sessions; train facilitators in discussion management and assessment use; integrate practical workshops	LAC Coordinator, Master Teachers, Assessment Coordinators	Quarterly	Improved session evaluations; increased teacher confidence in facilitation
Curriculum Content Concerns	Align LAC discussions with curriculum standards and competencies	Prepare structured LAC agenda linked to curriculum standards; review session outputs for relevance; document action plans	LAC Facilitators, Subject Heads	Every LAC session	LAC outputs clearly aligned with curriculum competencies

The proposed intervention program was carefully designed to address the critical challenges identified in Table 21. These initiatives specifically target issues such as schedule conflicts, overlapping activities, unreliable electricity supply, inadequate learning resources, insufficient teacher training, and concerns regarding curriculum content. Their overarching purpose is to strengthen the institutionalization of LAC within the school system and to ensure smoother implementation across all operational areas. By enhancing coordination, optimizing resource allocation, improving facilitator preparedness, and aligning curriculum content, the interventions aim to create a more effective and sustainable framework. These recommendations are firmly grounded in the quantitative findings of the study and further enriched by informal insights gathered during its conduct.

One key intervention is the establishment of fixed and protected LAC schedules. Since scheduling conflicts and overlapping activities were identified as serious concerns, the school administration should designate official LAC days in the academic calendar and strictly avoid inserting competing activities on those dates. Effective coordination among the school head, academic head, and LAC coordinators is essential to maintain consistency. Clear calendar planning, coupled with early announcements, will minimize disruptions and strengthen attendance.

Another important intervention is addressing overlapping school activities. A centralized planning system should be implemented at the start of each school year, ensuring that all major events, trainings, and programs are mapped out in advance. This allows LAC sessions to be strategically integrated into the annual plan without conflict. Administrative monitoring will further guarantee that LAC schedules are respected and upheld.

Concerns about electricity availability necessitate logistical planning. The school may consider backup measures such as securing alternative venues with generator access or scheduling sessions during hours when power supply is more stable. Preparing printed materials in advance can also minimize reliance on digital presentations and ensure continuity during interruptions.

To address the shortage of learning resources, the school could allocate a modest budget for LAC materials. Departments may collaborate by sharing existing instructional resources and establishing a centralized repository for lesson exemplars and assessment tools. This pooling of resources would reduce dependence on limited supplies and foster more productive and well-supported discussions.

Teacher training gaps were identified as a critical concern. To address this, regular capacity-building sessions should be organized for LAC facilitators and participants. These sessions may include workshops on collaborative discussion strategies, assessment interpretation, curriculum alignment, and action planning. Enhancing facilitator competence will directly improve the overall quality of LAC sessions.

In addition, issues related to curriculum content alignment can be mitigated through structured agenda planning. Each session should explicitly highlight its

connection to curriculum standards and learner competencies. Facilitators must ensure that discussions remain anchored in instructional relevance and practical classroom application, thereby maximizing the effectiveness of the LAC process.

Through these targeted interventions, the school can reduce operational barriers while sustaining the strong implementation level already observed. The goal is not to redesign LAC, but to stabilize and strengthen its delivery system so that serious logistical concerns no longer hinder its effectiveness.

These recommendations reflect the principle that professional development systems thrive when anchored in clear planning, adequate resource allocation, and strong administrative commitment. By directly confronting the critical concerns highlighted in the study, the institutionalization of LAC can evolve into a more consistent, stable, and sustainable practice across participating schools.

## **Conclusions**

Based on the findings of the study, the following conclusion is drawn:

In conclusion, the Learning Action Cell (LAC) has proven to be a highly effective and structured professional development mechanism, significantly enhancing teachers' instructional competence, professional attitudes, role perception, and teaching strategies. Its implementation across key instructional domains demonstrates inclusivity and consistency, with no significant differences observed across demographic groups. However, recurring operational challenges—such as scheduling conflicts, overlapping activities, limited resources, gaps in facilitator training, and curriculum alignment issues—underscore the need for stronger administrative coordination and logistical support. Sustaining long-term effectiveness requires institutional adjustments focused on stabilizing operations rather than altering the core structure. By addressing these logistical and structural concerns, schools can ensure the continued success and sustainability of LAC implementation across academic years.

## **Recommendations**

The recommendations of this study are firmly anchored in its findings and aligned with the overall conclusions. The proposed intervention programs directly addresses the operational challenges identified, particularly those related to scheduling conflicts, overlapping activities, electricity availability, limited learning resources, teacher training gaps, and curriculum content alignment.

While differences in concerns were noted across respondent groups, these did not translate into statistical variations in LAC effectiveness. Instead, they reflected shared operational issues consistently experienced by teachers regardless of age, designation, or tenure. This indicates that the challenges are institutional in nature rather than attributable to individual characteristics.

To stabilize and strengthen LAC implementation, the recommended programs emphasize:

**Calendar planning.** A clear timelines should be established to minimize scheduling conflicts.

**Centralized scheduling.** Activities should be coordinated to avoid overlaps and ensure efficiency.

**Resource allocation.** Adequate materials should be provided and address the issue on the availability of electricity.

**Facilitator training.** Enhance the preparedness of facilitators and capacitate them for instruction.

**Curriculum-aligned sessions.** Coherence between LAC activities and instructional content should be ensured.

These measures aim to reduce operational barriers while sustaining the positive outcomes already observed. By implementing them, the school can strengthen administrative coordination, improve logistical support, and enhance facilitator capacity. Collectively, these recommendations affirm the continuing relevance of LAC as a school-based professional development strategy and highlight the importance of consistent structural support to ensure its sustainability.

Finally, it is recommended that a future study be conducted to evaluate the implementation of these interventions. Such follow-up research will generate updated insights, capture shifts in teacher perceptions, and provide evidence to guide strategic planning for the long-term institutionalization of LAC. By systematically documenting outcomes and identifying emerging needs, this study can ensure that the interventions remain responsive, sustainable, and aligned with the evolving demands of school-based professional development.

## **Compliance with Ethical Standards**

This study was conducted in accordance with ethical research standards. Prior to data collection, permission was obtained from the Schools Division Superintendent, school principals, and relevant authorities. Participation of teachers was voluntary, with informed consent obtained from all respondents. Anonymity and confidentiality were maintained, ensuring that personal and professional information of participants remained secure. Data were used solely for research purposes, and all findings were reported honestly without fabrication, falsification, or inappropriate manipulation. The researchers adhered to professional guidelines and local educational regulations to safeguard participant welfare and uphold the integrity of the study.

## **Acknowledgements**

The researcher wishes to express her profound gratitude and sincere appreciation to the following individuals whose invaluable support, guidance, and encouragement made the completion of this study possible.

To the Adviser, Marites P. Talosig, for her dedicated guidance, patience, and insightful suggestions that greatly helped in the development and completion of this research.

To the Panel Members, Chairperson, Salome S. Carino, Marie Rose P. Ramos, Mai Rani Khristine A. Zipagan for their time, expertise, and constructive comments which significantly improved the quality of this study.

To the Dean of Graduate School, the facilitator, Maricel A. Pascua-Ramos for her support and for providing valuable comments and recommendations.

To the Statistician, Evelyn A. Cabrera for the valuable assistance in the statistical treatment and interpretation of the data.

To the Admin Assistant, Benelyn P. Jamora for her assistance and support in facilitating important academic documents and requirements.

To the Schools Division Superintendent, Rachel R. Llana for the support extended in the conduct of this research.

To the Schools District Supervisor, Arnel T. Madriaga, her former PSDS, and Rushel A. Lazaro, her current PSDS for the guidance and approval that allowed this study to be conducted.

To the School Principal, Florence N. Ellorin, for the unwavering support and understanding when she requested time for her research.

To the Administrators and Teachers of all Integrated Schools of Tumauni South and North District, for their cooperation and participation which greatly contributed to the successful gathering of data for this research.

To the researcher's FRIENDS, for their encouragement, understanding, and moral support throughout this academic undertaking.

To aunt Elvira Fillon, ninang Leilani Pagatpatan, and Inang Edeltrudes Eslabra, Mother In-Law for their thoughtful support and for generously helping prepare the refreshments and foods for the panel during the research presentation.

To the Father In-Law, Edilberto Eslabra, and uncle Mamerto Eslabra, for accompanying and driving her during proposal and final defense. Your willingness to patiently wait, even for extended hours until the completion of her defense, is deeply appreciated.

To her siblings, especially bunso Jestin Badiri, for patiently driving her around when she was floating her questionnaire, and for their support and inspiration that motivated her to persevere.

To her parents, Roger A. Badiri and Erlinda M. Badiri, for their unconditional love, guidance, encouragement, and continuous support throughout the completion of this study.

To her children, Joyce Andrea, Jhillian Claire, and James Zyruss who served as her inspiration and source of strength in completing this study.

To her husband, James T. Eslabra, for his unwavering love, patience, understanding, and constant support throughout the entire research journey.

Above all, to the Almighty Father, for His divine guidance, wisdom, and countless blessings that made this accomplishment possible.

## REFERENCES

- Bantugan. (2018). Teaching strategies acquired from seminar-workshops.
- Bates, & Morgan. (2018). Seven elements of effective professional development. *The Reading Teacher*, 7(5), 623–632.
- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better*. Harvard Education Press.
- Campbell. (2020). Learning Action Cell professional development approach, purposive sampling: Complex or simple, research case example. *Journal Research of Nursing*, 25(8), 652–661.
- Chavez, M. A. (2018). Enhancement program in the implementation of Learning Action Cell (LAC) [Unpublished manuscript/research study]. Department of Education.
- Culajara. (2022). The implementation of the Learning Action Cell: Improving distance education through effective conduct of Learning Action Cell. *ASEAN Journal of Education*, 8(1), 41–51.
- Day, C., & Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: Sustaining commitment and effectiveness over a career. *Oxford Review of Education*, 33(4), 423–443. <https://doi.org/10.1080/03054980701450743>
- De Rosas, P. B., Cabotajelloco, A. B., & Sanchez, L. P. (2019). The Learning Action Cell and its influence on the professional development of teachers in the District of Pililla. *Ascendens Asia Journal of Multidisciplinary Research and Abstracts*, 3(2J). Retrieved from <https://ojs.aaresearchindex.com/index.php/AAJMRA/article/view/4381>
- De Vera, J. L., De Borja, J. M. A., De Guzman, R. A. C., & Orleans, A. V. (2020). Addressing instructional gaps in K to 12 science teaching through Learning Action Cell (LAC). *International Journal of Research Publications*, 46(1), 1–17. DOI: 10.47119/IJRP10046122020961
- Department of Education. (2013). DepEd Order No. 43, s. 2013: Implementing Rules and Regulations of the Enhanced Basic Education Act of 2013. <https://www.deped.gov.ph>
- Department of Education. (2016). DepEd Order No. 35, s. 2016: Learning Action Cell as a continuing professional development strategy. <https://www.deped.gov.ph>
- Department of Education. (2017). DepEd Order No. 42, s. 2017: National Adoption and Implementation of the Philippine Professional Standards for Teachers (PPST). <https://www.deped.gov.ph>
- Department of Education. (2023, July 3). DepEd Order No. 014, s. 2023: Policy guidelines on the implementation of the National Learning Camp. Retrieved from [https://www.deped.gov.ph/wp-content/uploads/DO\\_s2023\\_014.pdf](https://www.deped.gov.ph/wp-content/uploads/DO_s2023_014.pdf)
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915–945. <https://doi.org/10.3102/00028312038004915>
- Gonzalez, A. (1986, March). Improving Philippine higher education: Perspective (p. 30). Department of Education, Culture, and Sports.
- Heritage, M. (2007). Formative assessment: What do teachers need to know and do? *Phi Delta Kappan*, 89(2), 140–145. <https://doi.org/10.1177/003172170708900210>
- Jackaria, P. M., & Caballes, D. G. (2022). Equipping teachers to adapt: A look into teachers' professional development programs in times of COVID-19 pandemic. *International Journal of Humanities and Education Development*, 4(4), 18–22.
- Kelchtermans, G. (2009). Who I am in how I teach is the message: Self-understanding, vulnerability, and reflection. *Teachers and Teaching: Theory and Practice*, 15(2), 257–272. <https://doi.org/10.1080/13540600902875332>

- Lassonde, C. A. (2020). Teacher collaboration for professional learning: Facilitating study, research, and inquiry communities.
- Lawani. (2018). School factors as determinants of primary school pupils.
- Madriaga, K. (2021). The quality of implementation of School Learning Action Cell (SLAC) among elementary schools in the Division of Quezon: Basis for program enhancement (Master's thesis, Master in Educational Management). Advised by E. S. Lavadia.
- Marquardt, M. J. (2019). Action learning for developing leaders and organizations: Principles, strategies, and cases.
- Ntshangase, M. (2021). Knowledge is a paramount virtue: A critical defense of the nobility of the teaching profession. *International Journal of Social Science and Humanities Research*, 9(3).
- Opfer, V. D., & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of Educational Research*, 81(3), 376–407.
- Republic Act No. 10533. (2013). Enhanced Basic Education Act of 2013. <https://www.officialgazette.gov.ph>
- Sergiovanni, T. J. (2015). *Strengthening the heartbeat: Leading and learning together in schools*. John Wiley & Sons.
- Silva, V. (2018, July). School Learning Action Cell as a key for teachers' professional development. ResearchGate. <https://doi.org/10.13140/RG.2.2.17523.37927>
- Tanner, D., & Tanner, L. (2007). *Curriculum development: Theory into practice* (4th ed.). Pearson Education.
- Vega, M. G. A. (2020). Investigating the Learning Action Cell (LAC) experiences of science teachers in secondary schools: A multiple case study. *IOER Multidisciplinary Research Journal*, 2(1).
- Wenger, E. (2018). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

**APA Citation:**

Eslabra, J. B., & Talosig, M. P. (2026). THE LEARNING ACTION CELL AS SCHOOL-BASED CONTINUING PROFESSIONAL DEVELOPMENT STRATEGY: ITS IMPLEMENTATION, BENEFITS AND CHALLENGES. *Ignatian International Journal for Multidisciplinary Research*, 4(5), 2361–2396. <https://doi.org/10.5281/zenodo.20398198>

Corresponding author: [joy.eslabra@deped.gov.ph](mailto:joy.eslabra@deped.gov.ph)