



Management of learning action cells, pedagogical practices and professional commitment of teachers: A mediation study

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Abstract

This study examined the mediating role of teachers' pedagogical practices in the relationship between the strategic management of Learning Action Cells (LACs) and teachers' professional commitment in public elementary schools in the Division of Ozamiz City for School Year 2025–2026. Using a quantitative explanatory correlational design with mediation analysis, data were collected from 150 teachers through stratified random sampling and researcher-made questionnaires. Descriptive and inferential statistics, including Pearson correlation, multiple regression, and mediation analysis, were employed. Results showed that the strategic management of LACs was very high, pedagogical practices were very good, and professional commitment was very high. Significant positive relationships were found among all key variables. Regression analysis identified leadership and collaboration, learner-centered instruction, and assessment practices as significant predictors of professional commitment. Mediation analysis further revealed that pedagogical practices partially mediated the relationship between LAC management and professional commitment. Overall, effective LAC management enhances teacher commitment both directly and indirectly through improved instructional practices.

Keywords: Learning Action Cells; Mediation Analysis; Pedagogical Practices; Strategic Management; Teacher Professional Commitment

1. Introduction

Education remains a key driver of national development, yet the effectiveness of reforms such as the Philippine K to 12 program depends largely on teachers' ability to translate policy into effective classroom practice. Despite institutional support, persistent instructional challenges compounded by heavy workloads and gaps in pedagogical preparation continue to hinder full implementation. This concern is reflected in the 2023–2024 National Achievement Test results in the Ozamiz City Division, where a substantial proportion of learners performed below proficiency, indicating continuing gaps in instructional quality. As a standardized measure of learning outcomes, these results underscore the need to strengthen school-based professional development that directly enhances teaching practice and student achievement.

In response, this study examines Learning Action Cells (LACs) as a collaborative professional development strategy aimed at bridging the gap between policy and practice. Anchored on a mediation framework, it investigates how LACs influence teachers' professional commitment through pedagogical practices. Specifically, it explores whether participation in LACs enhances instructional strategies and whether these improvements, in turn, strengthen teachers' commitment to the profession. By focusing on this pathway, the study moves beyond description to provide empirical evidence on how collaborative learning structures translate into professional outcomes.

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The study's significance lies in its contribution to understanding the mechanisms that drive teacher development in the Philippine context. Findings may inform policymakers, school leaders, and educators on how LACs can be strategically managed to improve both instructional quality and professional commitment. In addition, the study contributes to the literature on professional learning communities by clarifying the mediating role of pedagogical practices in linking collaborative engagement to sustained teacher motivation and improved student learning outcomes.

This study is limited to public elementary school teachers in the Schools Division of Ozamiz City during the specified school year and focuses on three variables: strategic management of LACs, pedagogical practices, and professional commitment. Employing a quantitative mediation design, it identifies variable relationships but does not capture deeper contextual or qualitative dimensions of teacher experience. As such, findings are context-bound and should be generalized to other settings with caution.

1.1. Conceptual Framework

This study is anchored in a mediation model in which teachers' pedagogical practices function as the key psychological and behavioral mechanism linking the strategic management of Learning Action Cells (LACs) to teachers' professional commitment. The framework assumes that well-managed LACs strengthen instructional practices, which in turn cultivate deeper professional engagement and commitment.

1.1.1. Strategic Management of Learning Action Cells

Learning Action Cells (LACs) are structured professional learning communities whose success hinges on intentional design, leadership support, and collaborative alignment. This strategic construct is defined by four core dimensions: Planning, which involves data-driven, participatory design to address instructional gaps (Rivera and Santos, 2022); Implementation, focusing on high-quality professional dialogue and collaborative problem-solving (Martinez, 2023); Monitoring and Evaluation, which utilizes feedback mechanisms and performance data to ensure accountability (Smith and Jones, 2023); and Leadership and Collaboration, emphasizing distributed leadership and psychological safety to bolster collective efficacy (Lewis and Clark, 2023). Together, these dimensions transition LACs from administrative compliance to a cohesive system of continuous instructional improvement.

1.1.2. Teachers' Pedagogical Practices

Teachers' pedagogical practices comprising learner-centered teaching, formative assessment, differentiated instruction, and technology integration function as dynamic, evidence-based outputs of collaborative professional development (Confesor & Belmi, 2022). Within the framework of Learning Action Cells (LACs), these practices transition from static routines to observable shifts in instructional behavior, driven by high-quality peer discourse and collective inquiry (Abadiano & Villastique, 2023). Research highlights that adopting learner-centered roles and systematic differentiation not only enhances student autonomy and manages learner variability but also significantly bolsters teacher job satisfaction and self-concept (Gonzales, 2021). Furthermore, the strategic use of data-driven assessment and technology integration (TPACK) relies on the social scaffolding of professional networks to refine pedagogical precision and reduce implementation anxiety (Villar, 2021). Ultimately, this transformation of instructional behaviors serves as a vital bridge, reinforcing professional identity and sustaining teacher commitment (Esparza et al., 2022).

1.1.3. Teachers' Professional Commitment

Professional commitment is a multidimensional construct representing a teacher's psychological attachment to their profession and institution (Berhanu, 2023). This includes affective commitment, characterized by emotional belonging and enthusiasm; normative commitment, driven by a moral obligation to institutional goals; continuance commitment, based on the perceived costs of leaving; and commitment to student learning, reflecting a dedication to instructional growth (Meyer and Allen, 2024; Alvarez, 2022). Collectively, these elements function within an input-mediator-output framework where strategic LAC management serves as the input that enhances pedagogical practices, ultimately fostering professional commitment as the primary output. This pathway illustrates how structured school-level collaboration sustains long-term teacher engagement and instructional excellence (Martinez, 2023; Kim and Park, 2022).

1.2. Statement of the Problem

This study aimed to determine the mediating effect of pedagogical practices on the relationship between Learning Action Cells (LAC) implementation and the professional commitment of teachers in one of the public elementary schools in the Division of Ozamiz City during the SY 2025-26. Specifically, it sought to answer the following research questions:

- What is the perceived level of strategic management of Learning Action Cells by school heads in terms of planning, implementation, monitoring and evaluation, and leadership and collaboration?
 - What is the level of teachers' pedagogical practices in terms of learner-centered teaching, assessment practices, differentiated instruction, and technology integration?
 - What is the level of teachers' professional commitment in terms of affective, normative, continuance, and commitment to student learning?
 - Is there a significant relationship between the strategic management of Learning Action Cells and the professional commitment of teachers?
 - Is there a significant relationship between the strategic management of Learning Action Cells and teachers' pedagogical practices?
 - Is there a significant relationship between teachers' pedagogical practices and their professional commitment?
 - Which of the independent variables predict singly or in combination with the teachers' professional commitment?
 - Do teachers' pedagogical practices significantly mediate the relationship between the strategic management of Learning Action Cells and teachers' professional commitment?
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2. Research methodology

2.1. Design

This study used a quantitative explanatory correlational design with mediation analysis to examine the relationships among the strategic management of Learning Action Cells (LACs), pedagogical practices, and professional commitment without manipulating variables. Consistent with the framework, the analysis tested whether pedagogical practices mediated the relationship between LAC management (independent variable) and professional commitment (dependent variable). Indirect effects were estimated to determine the extent to which LACs influence teacher commitment through enhanced pedagogical practices.

2.2. Setting

The study was conducted in public elementary schools in the Division of Ozamiz City, selected due to performance concerns, with 85.34% of Grade 6 learners scoring below proficiency in the 2023–2024 National Achievement Test. The division's implementation of an approved Learning Action Cell (LAC) Plan provided a structured framework for teacher professional development, making it a suitable context for examining the relationship between LAC implementation, pedagogical practices, and professional commitment.

2.3. Respondents

Using stratified random sampling, 150 Teacher I–III educators classified as Proficient under the Philippine Professional Standards for Teachers (PPST) were selected from 621 public elementary teachers in the Division of Ozamiz City for SY 2025–2026. Inclusion criteria required no more than five years of teaching experience and at least one year of LAC participation. The sample was proportionally stratified across districts, school sizes, and grade levels to ensure representativeness. All participants provided informed consent in accordance with ethical research standards.

2.4. Instruments

Data for this study were gathered using three different sets of questionnaires:

2.4.1. Strategic Management of LACs Questionnaire

Data were gathered using a researcher-developed instrument measuring the independent variable through Teacher I–III educators' perceptions of school heads' effectiveness in managing Learning Action Cell (LAC) sessions across four domains: planning, implementation, monitoring and evaluation, and leadership and collaboration. Content validity was established through expert review in educational management and research, ensuring clarity, relevance, and alignment with early-career teachers' experiences, with revisions made for comprehensive domain coverage. A pilot test conducted with non-participant teachers of similar characteristics demonstrated excellent internal consistency (Cronbach's $\alpha = 0.978$).

The responses were quantified using a five-point Likert scale:

Interpretation Guide for the Strategic Management of LAC Questionnaire

Responses	Continuum	Level of Strategic Management of LAC
5 – Always	4.20 – 5.00	Very High
4 – Often	3.40 – 4.19	High
3 – Sometimes	2.60 – 3.39	Moderate
2 – Rarely	1.80 – 2.59	Low
1 – Never	1.0 – 1.79	Very Low

2.4.2. Pedagogical Practices Questionnaire

This researcher-developed instrument measured the mediating variable by assessing the pedagogical competence of Teacher I–III educators (proficient teachers) with five or fewer years of experience and at least one year of LAC participation across four dimensions: learner-centered teaching, assessment practices, differentiated instruction, and technology integration. Construct validity was established through alignment with the Philippine Professional Standards for Teachers (PPST), while content validity was confirmed through expert review of item clarity, relevance, and essentiality, with revisions made accordingly. A pilot test demonstrated excellent internal consistency (Cronbach's $\alpha = 0.966$). The instrument utilized a five-point Likert scale for scoring and interpretation.

Interpretation Guide for the Teachers' Pedagogical Practices Questionnaire

Responses	Continuum	Level of Teachers' Pedagogical Practices
5 – Strongly Agree	4.20 – 5.00	Very Good
4 – Agree	3.40 – 4.19	Good
3 – Undecided	2.60 – 3.39	Fair
2 – Disagree	1.80 – 2.59	Poor
1 – Strongly Disagree	1.00 – 1.79	Very Poor

2.4.3. Professional Commitment Questionnaire

This researcher-developed instrument measured the dependent variable by assessing the professional commitment of Teacher I–III educators (proficient teachers) within their first five years of teaching across four dimensions: affective commitment, normative commitment, continuance commitment, and commitment to student learning. Grounded in a multidimensional framework, it provided a comprehensive assessment of teachers' engagement with their profession and school community. Content validity was established through expert review by specialists in behavioral sciences and education, ensuring alignment with the theoretical framework and relevance to early-career teachers. A pilot test involving a comparable group of educators demonstrated excellent internal consistency (Cronbach's $\alpha = 0.958$), indicating strong reliability. Responses were interpreted using the following scale:

Interpretation Guide for the Teachers' Professional Commitment Questionnaire

Responses	Continuum	Level of Teachers' Professional Commitment
5 – Strongly Agree	4.20 – 5.00	Very High
4 – Agree	3.40 – 4.19	High
3 – Undecided	2.60 – 3.39	Moderate
2 – Disagree	1.80 – 2.59	Low
1 – Strongly Disagree	1.00 – 1.79	Very Low

2.5. Data-Gathering Procedure

Data collection commenced following ethical clearance from the Misamis University–Research Ethics Committee and approval from the Schools Division Superintendent of Ozamiz City. Informed consent was obtained from all participants, ensuring voluntary participation and strict adherence to data privacy and confidentiality standards. The researcher personally administered the questionnaires in school settings to ensure clarity and maximize retrieval rates. Responses were coded to link Learning Action Cells, pedagogical practices, and professional commitment for mediation analysis while preserving anonymity, and were subsequently cleaned, organized, and encoded into a statistical matrix for analysis.

2.6. Ethical Considerations

Ethical approval was secured from the Misamis University–Research Ethics Committee prior to data collection. Participation was voluntary, and respondents were informed of their right to withdraw at any time without penalty. No harm was imposed on participants, and their dignity and welfare were upheld throughout the conduct of the study. Informed consent was obtained from all respondents, while confidentiality and anonymity were strictly maintained. The researcher upheld honesty and transparency by disclosing relevant affiliations and potential conflicts of interest and ensured that all findings accurately reflected the collected data without falsification or misrepresentation.

2.7. Data Analysis

Mean and Standard Deviation were used to describe the levels of Learning Action Cells (LACs), pedagogical practices, and professional commitment among teachers. Pearson Product-Moment Correlation (Pearson r) was applied to determine the strength and direction of relationships among variables, specifically between LACs and professional commitment, LACs and pedagogical practices, and pedagogical practices and professional commitment. Stepwise Multiple Regression Analysis was conducted to identify the strongest predictors of professional commitment by examining the unique and combined contributions of LACs and pedagogical practices to variance in commitment scores. Finally, General Linear Mediation Analysis was performed to test the hypothesized model by estimating the indirect effect of LACs on professional commitment through pedagogical practices, thereby determining whether pedagogical practices served as a significant mediating mechanism.

3. Results and discussion

3.1. Level of Strategic Management of Learning Action Cells

Data from Table 1 indicate that the strategic management of Learning Action Cells (LAC) by school heads is at a very high level ($M=4.83$; $SD=0.37$). This reflects the effective use of LACs as structured, school-based professional development mechanisms that integrate planning, implementation, monitoring, and leadership functions. Through these processes, school heads promote instructional alignment, collaborative learning, and continuous teacher development, thereby strengthening school effectiveness (Fullan and Quinn, 2023; Schleicher, 2023). Such instructional leadership is vital in translating professional development initiatives into meaningful improvements in teaching practice and school performance (Hallinger, 2021).

Across domains, Leadership and Collaboration obtained the highest mean ($M=4.84$; $SD=0.35$), indicating strong teamwork, shared accountability, and open professional communication among teachers and school leaders. This suggests well-established professional learning communities where collaboration and exchange of best practices are actively sustained (Garcia and Abad, 2021; Hargreaves and O'Connor, 2021). Monitoring and Evaluation ($M=4.83$; $SD=0.37$) and Implementation ($M=4.82$; $SD=0.38$) also showed very high levels, reflecting consistent tracking of LAC outcomes and adequate provision of resources to support implementation (Santos and Reyes, 2022; Fullan, 2022).

Although Planning also registered a very high rating ($M=4.81$; $SD=0.39$), it was the lowest among the domains, suggesting a relative area for enhancement. This implies that while execution and collaboration are strong, challenges remain in long-term alignment, strategic foresight, and resource prioritization common issues in complex school leadership contexts (Netolicky, 2021; Day et al., 2020). Strengthening data-informed and goal-aligned planning is essential to improve coherence and sustainability of LAC initiatives, ensuring that school leaders balance immediate implementation with long-term strategic direction as lead learners (Schleicher, 2023; Fullan, 2022; Hallinger, 2021).

Table 1 School Heads' Perceived Level of Strategic Management of Learning Action Cells

Constructs	M	SD	Remarks
Planning	4.81	0.39	Very High
Implementation	4.82	0.38	Very High
Monitoring and Evaluation	4.83	0.37	Very High
Leadership and Collaboration	4.84	0.35	Very High
Overall Level of Management	4.83	0.37	Very High

Note: 4.20-5.00 (Very High); 3.40-4.19 (High); 2.60-3.39 (Moderate); 1.30-2.59 (Low); 1.00-1.29 (Very Low)

3.2. Level of Teachers' Pedagogical Practices

Data from Table 2 show a very good level of teachers' pedagogical practices ($M=4.83$; $SD=0.36$), indicating consistent use of effective, evidence-based instructional strategies. This reflects teachers' capability to create interactive and student-centered learning environments that promote engagement and achievement (Garcia and Chen, 2022; Thompson and Miller, 2023). Through varied instructional approaches and assessment practices, teachers ensure responsive and inclusive instruction aligned with quality education standards (Al-Mahdi et al., 2024).

Across domains, Learner-centered Teaching obtained the highest mean ($M=4.86$; $SD=0.33$), highlighting strong emphasis on student autonomy and active knowledge construction, which are essential for developing critical thinking and motivation (Thompson and Miller, 2023). Assessment Practices ($M=4.83$; $SD=0.35$) and Differentiated Instruction ($M=4.82$; $SD=0.38$) also registered very good levels, showing that teachers effectively use feedback and adaptive strategies to address diverse learner needs (Al-Mahdi et al., 2024; Garcia and Chen, 2022).

Technology Integration obtained the lowest mean ($M=4.79$; $SD=0.39$), though still very good, indicating a relative area for enhancement. This suggests limited movement beyond basic digital tools toward more transformative instructional uses, possibly due to varying digital competence and resource constraints (Smith and Roberts, 2025; Nguyen, 2021). Strengthening this area through targeted professional development is essential to align it with other strong pedagogical domains and support more innovative, technology-enhanced instruction (Zhao and Martin, 2023; Schleicher, 2023).

Table 2 Teachers' Pedagogical Practices

Constructs	M	SD	Remarks
Learner-Centered Teaching	4.86	0.33	Very Good
Assessment Practices	4.83	0.35	Very Good
Differentiated Instruction	4.82	0.38	Very Good
Technology Integration	4.79	0.39	Very Good
Overall Pedagogical Practices	4.83	0.36	Very Good

Note: 4.20-5.00 (Very Good); 3.40-4.19 (Good); 2.60-3.39 (Fair); 1.30-2.59 (Poor); 1.00-1.29 (Very Poor)

3.3. Teachers' Level of Professional Commitment

The data in Table 3 reveal a very high level of professional commitment among teachers ($M=4.81$; $SD=0.38$), indicating strong dedication and psychological attachment to the teaching profession. This sustained commitment contributes to instructional effectiveness and fosters a stable and productive school environment (Lauermann and Berger, 2021; Arar and Nasra, 2022). Teachers who are highly committed are more likely to remain motivated, exert greater effort in their instructional tasks, and positively influence student learning outcomes (Suleman et al., 2023).

Across the dimensions, Commitment to Student Learning obtained the highest mean ($M=4.87$; $SD=0.31$), underscoring that teachers strongly anchor their professional identity in students' academic progress and well-being (Lauermann and Berger, 2021; Suleman et al., 2023). Affective Commitment ($M=4.83$; $SD=0.36$) and Normative Commitment ($M=4.83$; $SD=0.35$) were also very high, suggesting that teachers maintain both emotional attachment to their schools

and a strong sense of moral and professional obligation. These forms of commitment reinforce engagement, persistence, and resilience in the teaching profession (Arar and Nasra, 2022; Kaur and Walia, 2022).

Continuance Commitment registered the lowest mean ($M=4.69$; $SD=0.48$), though still within the very high range, indicating relatively greater variability among teachers. This suggests that extrinsic factors such as job security and benefits are less central compared to intrinsic motivation and professional values, although they still play a role in retention decisions (Kaur and Walia, 2022; Nguyen and Teo, 2024). Overall, the findings portray a workforce primarily driven by internal motivation and student-centered commitment, with implications that strengthening institutional support systems such as career progression, compensation, and job security may further enhance and sustain teacher commitment (Suleman et al., 2023; Arar and Nasra, 2022).

Table 3 Teachers' Level of Professional Commitment

Constructs	M	SD	Remarks
Affective Commitment	4.83	0.36	Very High
Normative Commitment	4.83	0.35	Very High
Continuance Commitment	4.69	0.48	Very High
Commitment to Student Learning	4.87	0.31	Very High
Overall Pedagogical Practices	4.81	0.38	Very High

Note: 4.20-5.00 (Very High); 3.40-4.19 (High); 2.60-3.39 (Moderate); 1.30-2.59 (Low); 1.00-1.29 (Very Low)

3.4. Relationship between the School Heads' Strategic Management of Learning Action Cells and the Professional Commitment of Teachers

The Pearson's correlation analysis in Table 4 reveals a very highly significant positive relationship ($p<0.05$) between school heads' strategic management of Learning Action Cells (LAC) and teachers' professional commitment. This indicates that stronger management practices are associated with higher levels of teacher dedication. Specifically, Planning and Implementation show strong correlations across all commitment dimensions— affective ($r=0.582$), normative ($r=0.585$), continuance ($r=0.512$), and commitment to student learning ($r=0.517$)—suggesting that clear planning and participatory execution enhance teachers' sense of direction, ownership, and alignment with school goals (Nguyen and Thu, 2023; Al-Harthy and Al-Abri, 2022).

Monitoring and Evaluation likewise demonstrate significant relationships with teacher engagement, particularly in affective commitment ($r=0.641$ to 0.676) and commitment to student learning ($r=0.510$ to 0.594). When perceived as supportive rather than controlling, monitoring functions as constructive feedback that strengthens teachers' emotional investment and professional self-worth (Bektaş et al., 2021; García-Torres, 2024). This form of instructional supervision helps align individual practice with institutional goals while fostering clarity, reducing uncertainty, and sustaining commitment within the workforce (Benson and Cascio, 2023).

However, Monitoring and Evaluation show no significant relationship with normative commitment ($r=0.557$, $p=0.585$), implying that teachers' sense of moral obligation to remain in the profession is less influenced by managerial practices and more shaped by internal values, professional ethics, and school culture (Kaur and Walia, 2022; Aarabi et al., 2025). While strategic management strongly enhances emotional and behavioral dimensions of commitment, it appears less influential on deeply held professional beliefs (Nguyen and Teo, 2024). Overall, the findings emphasize the need to strengthen LAC strategic management while also cultivating a supportive school culture that integrates recognition, collaboration, and professional growth to sustain a committed and high-performing teaching workforce (Benson and Cascio, 2023; Nguyen and Thu, 2023).

Table 4 Relationship between School Heads' Strategic Management and Teachers' Professional Commitment

Variables		Affective Commitment	Normative Commitment	Continuance Commitment	Commitment to Student Learning
Planning Implementation	<i>r</i>	0.582***	0.585***	0.512***	0.517***
	<i>p</i>	< 0.001	< 0.001	< 0.001	< 0.001
Monitoring and Evaluation	<i>r</i>	0.641***	0.534***	0.546***	0.510***
	<i>p</i>	< 0.001	< 0.001	< 0.001	< 0.001
Planning Implementation	<i>r</i>	0.631***	0.513***	0.521***	0.539***
	<i>p</i>	< 0.001	< 0.001	< 0.001	< 0.001
Monitoring and Evaluation	<i>r</i>	0.676***	0.557	0.526***	0.594***
	<i>p</i>	< 0.001	0.585	< 0.001	< 0.001

Notes: Ho: There is no significant relationship between the strategic management of learning action cells and the professional commitment of teachers

*** $p < 0.01$ (Very Highly Significant); ** $p < 0.01$ (Highly Significant); * $p < 0.05$ (Significant)

3.5. Relationship Between the Strategic Management of LAC and Teachers' Pedagogical Practices

The Pearson's correlation analysis in Table 5 indicates a very highly significant positive relationship ($p < 0.05$) across all variables, demonstrating that the strategic management of Learning Action Cells (LAC) strongly influences teachers' pedagogical practices. Specifically, Planning and Implementation show notable correlations with learner-centered teaching ($r = 0.385$), assessment practices ($r = 0.465$), and differentiated instruction ($r = 0.506$). These results suggest that clear instructional direction and participatory planning enable teachers to better align classroom practices with learner needs, reducing instructional ambiguity and improving coherence in delivery (Mertens and Sullivan, 2023; Al-Harthy, 2024).

Monitoring and Evaluation likewise show significant relationships, particularly with differentiated instruction ($r = 0.559$) and assessment practices ($r = 0.535$). This implies that consistent instructional supervision and structured feedback mechanisms strengthen teachers' capacity to refine instructional strategies and respond to learner diversity. Such processes promote data-informed decision-making and help ensure that teaching practices remain aligned with curricular and institutional priorities (Kim and Lee, 2025; Chen and Guo, 2024; Al-Harthy, 2024).

However, the weakest relationship is observed between Monitoring and Evaluation and technology integration ($r = 0.383$), suggesting that general LAC management practices are less effective in developing digital teaching competencies. This may be due to barriers such as limited ICT skills, inadequate infrastructure, and the need for more specialized and sustained training support (Nguyen, 2022; Smith and Potter, 2023). Overall, the findings affirm that structured leadership and collaborative professional learning are key drivers of pedagogical improvement, while also highlighting the need to strengthen targeted support for technology integration to enhance overall instructional effectiveness (Mertens and Sullivan, 2023; Chen and Guo, 2024).

Table 5 Relationship between School Heads' Strategic Management of LAC and Teachers' Pedagogical Practices

Variables		Learner-Centered Teaching	Assessment Practices	Differentiated Instruction	Technology Integration
Planning Implementation	<i>r</i>	0.385***	0.465***	0.506***	0.456***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001
Monitoring and Evaluation	<i>r</i>	0.436***	0.535***	0.559***	0.388***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001
Planning Implementation	<i>r</i>	0.495***	0.502***	0.536***	0.402***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001
Monitoring and Evaluation	<i>r</i>	0.450***	0.493***	0.470***	0.383***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001

Notes: Ho: There is no significant relationship between the strategic management of learning action cells and the teachers' pedagogical practices
 *** $p < 0.01$ (Very Highly Significant); ** $p < 0.01$ (Highly Significant); * $p < 0.05$ (Significant)

3.6. Relationship Between Teachers' Pedagogical Practices and their Professional Commitment

The Pearson's correlation analysis in Table 6 indicates a very highly significant positive relationship ($p < 0.05$) across all variables, showing that teachers' mastery of instructional strategies strongly influences their professional commitment. The strongest correlations are observed between pedagogical domains and commitment to student learning ($r = 0.626$ to 0.769), suggesting that effective learner-centered teaching and assessment practices enhance teachers' sense of responsibility and professional identity. When teachers feel competent in engaging learners and evaluating progress, their intrinsic motivation and attachment to the profession are strengthened (Sadeghi et al., 2021; Bozkurt, 2023; Nguyen and Habók, 2022).

Differentiated Instruction also shows a strong relationship with professional commitment, particularly in relation to student-focused outcomes ($r = 0.734$). This indicates that responsiveness to diverse learning needs reinforces teachers' sense of purpose and instructional effectiveness. However, its relationship with affective commitment is comparatively lower ($r = 0.490$), implying that while differentiation improves learner outcomes, the increased workload and planning demands may slightly temper teachers' emotional attachment to their organization (Bozkurt, 2023; Loreman et al., 2024).

These findings are consistent with Social Cognitive Theory and Self-Determination Theory, which posit that instructional competence enhances motivation, self-efficacy, and professional commitment. Pedagogical effectiveness therefore serves not only as an instructional outcome but also as a driver of teacher satisfaction and retention. Accordingly, strengthening teachers' instructional mastery within supportive institutional structures is essential for sustaining engagement and long-term commitment (Hattie and Donoghue, 2023; Fisher and Frey, 2021).

Table 6 Relationship Between the Teachers' Pedagogical Practices and their Professional Commitment

Variables		Affective Commitment	Normative Commitment	Continuance Commitment	Commitment to Student Learning
Learner-Centered Teaching Assessment Practices	<i>r</i>	0.618***	0.614***	0.535***	0.710***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001
Differentiated Instruction	<i>r</i>	0.672***	0.592***	0.567***	0.734***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001
Learner-Centered Teaching Assessment Practices	<i>r</i>	0.654***	0.685***	0.605***	0.769***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001
Differentiated Instruction	<i>r</i>	0.490***	0.566***	0.547***	0.626***
	<i>p</i>	<0.001	<0.001	<0.001	<0.001

Notes: Ho: There is no significant relationship between the teachers' pedagogical practices and their professional commitment
 *** $p < 0.01$ (Very Highly Significant); ** $p < 0.01$ (Highly Significant); * $p < 0.05$ (Significant)

3.7. Predictors of Teachers' Professional Commitment

The multiple regression analysis in Table 7 presents a statistically significant model ($F=198$, $p<0.001$), indicating that leadership and collaboration, learner-centered teaching, and assessment practices collectively explain 79.6% of the variance in teachers' professional commitment (Adjusted $R^2=0.796$). This substantial explanatory power suggests that professional commitment is largely shaped by the institutional and organizational environment rather than individual disposition alone, a finding further reinforced by the non-significant constant ($p=0.109$). Among the predictors, leadership and collaboration emerged as the strongest influence ($\beta=0.375$, $p<0.001$), underscoring the critical role of shared decision-making and supportive leadership structures in enhancing teacher motivation and retention (Nguyen and Hunter, 2023; Salgado and Tan, 2024).

Learner-centered teaching also significantly predicts professional commitment ($\beta=0.301$, $p<0.001$), indicating that instructional approaches that promote active student engagement strengthen teachers' sense of purpose, autonomy, and professional fulfillment (Bozkurt, 2023; Nguyen and Habók, 2022). In contrast, assessment practices, while still significant ($\beta=0.255$, $p<0.001$), show the weakest effect among the predictors. This suggests that assessment is often perceived more as a procedural or compliance-oriented task rather than a primary driver of professional motivation (Chen et al., 2025).

These findings are consistent with the Resource-Based View and Transformational Leadership Theory, which emphasize the importance of human capital, collaboration, and inspirational leadership in fostering organizational commitment. Overall, the results highlight the need for integrated, system-wide improvement strategies rather than isolated interventions. Strengthening professional learning communities and shared leadership practices, while reframing assessment as a tool for learning and growth rather than compliance, can further enhance teacher engagement and sustain a more committed and effective teaching workforce.

Table 7 Predictors of Teachers' Professional Commitment

Predictors	Coef (β)	SE Coef	t- value	p-value
(Constant)	0.299	0.1857	1.61	0.109
Leadership and Collaboration	0.375	0.0437	8.58	< 0.001
Learner-Centered Teaching	0.301	0.0733	4.11	< 0.001
Assessment Practices	0.255	0.0658	3.87	< 0.001
Adjusted r^2	0.796			
F value	198			
p-value	< 0.001			

$$\text{Teachers' Professional Commitment} = 0.299 + (0.375 * \text{Leadership and Collaboration}) + (0.301 * \text{Learner-Centered teaching}) + (0.255 * \text{Assessment Practices})$$

3.8. Mediation and Path Estimates of teachers' Pedagogical Practices on the Relationship between the School Heads' Strategic Management and Teachers' Professional Commitment

The mediation analysis in Table 8 indicates that pedagogical practices significantly mediate the relationship between school heads' strategic management and teachers' professional commitment. The total effect is statistically significant (Total = 0.700, $p<0.001$), confirming that effective strategic leadership strongly influences teacher dedication (Chen and Huang, 2022). The indirect effect ($a \times b = 0.341$, $p<0.001$) accounts for 48.8% of the total effect, suggesting that strategic management strengthens commitment primarily by enhancing pedagogical practices. In this pathway, leadership provides instructional direction and structural support that improves classroom practices (Path $a = 0.636$), which in turn enhances teachers' sense of efficacy and professional fulfillment (Path $b = 0.536$; Thompson, 2024).

At the same time, the direct effect remains significant ($c = 0.358$, $p<0.001$), representing 51.2% of the total effect, indicating partial mediation. This means that strategic management also influences professional commitment through other mechanisms beyond pedagogy, including school climate, equitable resource allocation, and organizational transparency (Smith and Robinson, 2025). These findings suggest that leadership exerts both instructional and institutional influence in shaping teacher commitment.

Overall, the results align with Social Learning Theory and the Resource-Based View, emphasizing that leadership strengthens both instructional capacity and organizational conditions that support sustained commitment. This underscores the importance of a dual-focus leadership approach that integrates pedagogical development with broader school improvement strategies. By simultaneously enhancing classroom practice and fostering a supportive, transparent organizational environment, school leaders can promote more cohesive and sustained teacher commitment and effectiveness.

Table 8 Mediation and Path Estimates of teachers' Pedagogical Practices on the Relationship between the School Heads' Strategic Management and Teachers' Professional Commitment

Mediation Estimates				95% confidence Interval				% Mediation
Effect	Label	Estimate	SE	Lower	Upper	Z	P	
Indirect	a × b	0.341	0.0435	0.256	0.426	7.83	< 0.001	48.8
Direct	C	0.358	0.0454	0.269	0.448	7.89	< 0.001	51.2
Total	c + a × b	0.700	0.0468	0.608	0.791	14.96	< 0.001	100.0
Path Estimates								
STRATPLANNING → PEDAGOGICAL PRACTICES	A	0.636	0.0592	0.520	0.752	10.73	< 0.001	
PEDAGOGICAL PRACTICES → COMMITMENT	B	0.536	0.0468	0.445	0.628	11.46	< 0.001	
STRATPLANNING → COMMITMENT	C	0.358	0.0454	0.269	0.448	7.89	< 0.001	

The mediation model reinforces the findings in Table 8 by showing the interrelationships among school heads' strategic management, teachers' pedagogical practices, and professional commitment. Strategic management has a strong positive effect on pedagogical practices ($\beta = 0.64$), indicating that clear direction, structured planning, and instructional support significantly enhance teaching practices. This is consistent with evidence that leadership grounded in instructional guidance improves classroom effectiveness and consistency (Chen and Huang, 2022; Martinez-Garrido and Duarte, 2023; Thompson, 2024).

In turn, pedagogical practices significantly influence professional commitment ($\beta = 0.54$), suggesting that teachers who feel more competent and effective in their instructional delivery tend to exhibit higher levels of dedication and engagement. Related studies emphasize that instructional competence strengthens teacher efficacy, professional identity, and job satisfaction, all of which contribute to stronger professional commitment (Chen and Huang, 2022; Martinez-Garrido and Duarte, 2023; Thompson, 2024).

The direct effect of strategic management on professional commitment remains significant ($\beta = 0.36$), confirming partial mediation. This implies that leadership also fosters commitment independently through mechanisms such as organizational climate, support, and trust (Nguyen and Ng, 2021; Lopez, 2023; Smith and Robinson, 2025). Overall, the model underscores pedagogical practices as a central mediating pathway, showing that while strategic management directly influences professional commitment, its strongest effect is exerted indirectly through the enhancement of teachers' instructional practices.

4. Summary

This study examined how teachers' pedagogical practices mediate the relationship between the strategic management of Learning Action Cells (LACs) and teachers' professional commitment in selected public elementary schools in the Division of Ozamiz City during School Year 2025–2026. Using a quantitative explanatory correlational design with mediation analysis, data from 150 teachers selected through stratified random sampling and gathered via validated researcher-made questionnaires were analyzed using mean, standard deviation, Pearson r , regression, and mediation techniques. Findings revealed that the strategic management of LACs was at a very high level across domains, teachers' pedagogical practices were rated very good, and professional commitment was likewise very high. Significant positive relationships were established among LAC management, pedagogical practices, and professional commitment. Leadership and collaboration, learner-centered teaching, and assessment practices significantly predicted professional commitment, with leadership and collaboration emerging as the strongest predictor. Moreover, pedagogical practices partially mediated the relationship between LAC management and professional commitment, indicating that instructional competence serves as a key pathway through which leadership influences commitment.

From these findings, it is concluded that effective strategic management of LACs particularly in planning, implementation, monitoring and evaluation, and leadership enhances teachers' pedagogical practices in areas such as learner-centered teaching, assessment, differentiated instruction, and technology integration, thereby strengthening their professional commitment across affective, normative, and continuance dimensions. The results affirm that both LAC management and pedagogical practices significantly contribute to professional commitment, with pedagogical practices functioning as the mechanism that translates leadership efforts into increased teacher engagement and dedication.

5. Conclusions

In light of these conclusions, it is recommended that school heads systematically integrate LAC initiatives into the School Improvement Plan and Annual Implementation Plan, supported by responsive In-Service Training programs. Schools should strengthen monitoring and feedback systems through SMEA and RPMS-PPST-aligned post-observation conferences, while also enhancing teachers' digital competencies through targeted ICT and Learning Management System training. Sustained collaboration may be achieved by institutionalizing Professional Learning Communities and shared governance structures, alongside formalized peer coaching, mentoring, and lesson study led by Master Teachers. Additionally, establishing recognition systems and clear career advancement pathways can further reinforce teacher motivation and retention. Finally, education stakeholders are encouraged to utilize research funding for future mixed-methods studies incorporating variables such as school climate and teacher well-being to deepen understanding of factors influencing teacher commitment.

Compliance with ethical standards

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Disclosure of Conflict of Interests

No conflict of interest to be disclosed.

Statement of informed consent

Written informed consent was elicited from all participants prior to their inclusion in the study

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