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RESEARCH ARTICLE

The Influence of Collegial Cohesion on the Implementation of Professional Learning Communities in Public Elementary Schools

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Abstract

This study examined the influence of collegial cohesion on the implementation of Professional Learning Communities (PLCs) in public elementary schools in the City Schools Division of Tayabas, Philippines. Using a descriptive–correlational design, data were collected from 212 public elementary teachers selected through random sampling. Collegial cohesion was operationalized through mutual trust and respect, open communication, shared decision-making, and interpersonal support, while PLC implementation was assessed in terms of collective learning and shared practices, collaborative culture, focus on student outcomes, and reflective dialogue. Results revealed high levels of collegial cohesion and PLC implementation across schools. No significant differences were found in collegial cohesion across most demographic variables, while PLC implementation differed significantly by training exposure. Pearson correlation analysis indicated a strong, positive relationship between collegial cohesion and PLC implementation, underscoring the role of relational factors in sustaining collaborative professional learning. The study proposes a Collegial Cohesion–to–Implementation (C2I) Framework to strengthen PLC practices through relational leadership, shared decision structures, and sustained professional development. Findings support policy and leadership initiatives aligned with SDG 4 (Quality Education) by emphasizing teacher collaboration as a lever for instructional improvement.

Keywords

collegial cohesion; professional learning communities; teacher collaboration; school leadership; public elementary schools

INTRODUCTION

Professional Learning Communities (PLCs) have become a central strategy for school improvement, grounded in the principles of collective inquiry, collaborative practice, and a sustained focus on student learning outcomes (DuFour & Fullan, 2020). International research consistently demonstrates that well-functioning PLCs strengthen instructional coherence, enhance teachers' professional capacity, and contribute to improved learner achievement by fostering shared responsibility for teaching and learning. As education systems respond to increasing demands for accountability, equity, and instructional quality, PLCs are widely promoted as mechanisms that enable schools to move beyond isolated teaching toward continuous, collaborative professional learning.

In the Philippine context, the Department of Education has formally institutionalized PLCs through school-based management and continuous professional development initiatives, positioning collaboration as a cornerstone of instructional improvement. Despite this policy commitment, the quality and depth of PLC implementation remain uneven across schools, with many PLCs operating at a procedural or compliance-oriented level rather than as genuine communities of practice. Emerging evidence suggests that the mere structural adoption of PLCs—such as scheduling meetings or forming teams—is insufficient to sustain meaningful collaboration or instructional change.

Recent scholarship highlights that the effectiveness and sustainability of PLCs depend heavily on relational conditions among teachers, commonly referred to as collegial cohesion. Collegial cohesion encompasses mutual trust, open and respectful communication, shared decision-making, and interpersonal support, all of which create the psychological safety necessary for teachers to engage in honest reflection, instructional risk-taking, and collective problem-solving. In the absence of these relational foundations, PLCs are likely to become fragmented, superficial, or short-lived, regardless of policy mandates.

Although international studies have established strong links between collegial relationships and collaborative school practices, empirical research examining this relationship within Philippine public schools remains limited. In particular, there is a lack of context-specific evidence on how collegial cohesion influences the actual implementation of PLCs at the elementary level. Addressing this gap, the present study investigates the influence of collegial cohesion on PLC implementation in public elementary schools in Tayabas City, Philippines. By focusing on the relational dimensions of collaboration, this study seeks to contribute empirical insights that inform school leadership, professional development, and policy efforts aimed at strengthening PLCs as vehicles for sustainable instructional improvement and quality education.

Methods

Research Design

A quantitative descriptive–correlational design was employed to examine levels of collegial cohesion, PLC implementation, and the relationship between these variables without manipulating school conditions.

Participants and Setting

The population comprised 470 public elementary teachers in the City Schools Division of Tayabas. Using random sampling and a 95% confidence level, 212 teachers with at least three years of service were selected, ensuring representation across school contexts.

Instrumentation

Data were gathered using a researcher-developed questionnaire validated by experts in educational leadership. The instrument consisted of: (1) demographic profile; (2) collegial cohesion (four domains); and (3) PLC implementation (four domains). Items were rated on a 4-point Likert scale. Reliability testing yielded excellent internal consistency (Cronbach’s $\alpha = .97$).

Data Analysis

Descriptive statistics (mean, SD) summarized levels of cohesion and PLC implementation. Independent-samples t-tests and one-way ANOVA tested group differences, while Pearson’s r examined the relationship between collegial cohesion and PLC implementation. Statistical significance was set at $p < .05$.

Results and Findings

Table 1. Level of Collegial Cohesion among Teachers

| Domain | Mean (M) | SD | Verbal Interpretation |
|-----------------------------------|-------------|-------------|-----------------------|
| Mutual Trust and Respect | 3.32 | 0.41 | High |
| Open Communication | 3.28 | 0.43 | High |
| Shared Decision-Making | 3.21 | 0.45 | High |
| Interpersonal Support | 3.36 | 0.39 | High |
| Overall Collegial Cohesion | 3.29 | 0.34 | High |

As shown in Table 1, teachers reported a high level of collegial cohesion ($M = 3.29$, $SD = 0.34$), with interpersonal support and mutual trust receiving the highest ratings. This indicates a strong relational climate characterized by emotional support, professional respect, and open interaction among teachers. Such conditions are widely recognized as foundational to collaborative professional cultures, as they enable risk-taking, shared problem-solving, and sustained instructional dialogue. Prior studies affirm that trust and interpersonal support are core components of effective professional communities and are positively associated with teacher collaboration and school improvement (Bryk & Schneider, 2002; Vangrieken et al., 2020).

Table 2. Level of Professional Learning Community (PLC) Implementation

| Dimension | Mean (M) | SD | Verbal Interpretation |
|---|----------|------|-----------------------|
| Collective Learning and Shared Practice | 3.31 | 0.38 | High |
| Collaborative Culture | 3.27 | 0.40 | High |
| Focus on Student Learning Outcomes | 3.34 | 0.36 | High |
| Reflective Dialogue | 3.25 | 0.42 | High |

| Dimension | Mean (M) | SD | Verbal Interpretation |
|----------------------------|----------|------|-----------------------|
| Overall PLC Implementation | 3.29 | 0.35 | High |

Table 2 indicates that PLC implementation was rated high across all dimensions ($M = 3.29$, $SD = 0.35$). The strongest domain was focus on student learning outcomes, suggesting that collaborative efforts were anchored on instructional improvement and learner performance. High ratings in collective learning and reflective dialogue further imply that teachers regularly engaged in joint planning, data-informed discussions, and reflective practices. These findings suggest mature PLC practices, consistent with international evidence that effective PLCs prioritize shared responsibility for student learning and continuous professional inquiry (DuFour & Fullan, 2020; Olmo-Extremuera et al., 2023).

Table 3. Differences in Collegial Cohesion and PLC Implementation by Demographic Variables

| Variable | Test Used | Test Value | p-value | Interpretation |
|--|-----------|------------------------------|-------------|--------------------|
| Collegial Cohesion by Age | ANOVA | $F = 1.12$ | .33 | Not Significant |
| Collegial Cohesion by Sex | t-test | $t = 0.48$ | .63 | Not Significant |
| Collegial Cohesion by Educational Attainment | ANOVA | $F = 1.36$ | .26 | Not Significant |
| Collegial Cohesion by Years of Service | ANOVA | $F = 1.08$ | .34 | Not Significant |
| PLC Implementation by Trainings Attended | ANOVA | $F = 4.21$ | .016 | Significant |

Results in Table 3 show that collegial cohesion did not significantly differ across age, sex, educational attainment, or years of service ($p > .05$), indicating that cohesion is institutionally embedded rather than individually driven. This suggests that collegial relationships are shaped by shared school culture and leadership practices rather than personal characteristics, reinforcing findings that collaborative norms are collective organizational properties (Hargreaves & O’Connor, 2018).

In contrast, PLC implementation differed significantly by number of trainings attended ($F = 4.21$, $p = .016$). Teachers with greater professional development exposure reported stronger PLC practices, highlighting the role of capacity-building and sustained learning opportunities in deepening collaboration. This aligns with evidence that targeted professional development strengthens PLC effectiveness by enhancing teachers’ shared language, skills, and collective efficacy (Stoll et al., 2006; Darling-Hammond et al., 2017).

Table 4. Relationship between Collegial Cohesion and PLC Implementation

| Variables | r | p-value | Strength |
|---|-------------|------------------|-----------------|
| Collegial Cohesion × PLC Implementation | 0.73 | < .001 | Strong Positive |

Pearson correlation analysis (Table 4) revealed a strong, positive relationship between collegial cohesion and PLC implementation ($r = 0.73$, $p < .001$). This indicates that schools with higher levels of trust, interpersonal support, and shared decision-making also

demonstrated more robust PLC practices. The strength of this relationship suggests substantial practical significance, underscoring that relational conditions are not peripheral but central to collaborative professional learning. This finding is consistent with Social Capital Theory, which posits that strong relational ties facilitate knowledge sharing and collective action (Putnam, 2000), and with PLC research emphasizing that collaboration thrives in environments grounded in trust and mutual support (Louis & Marks, 1998; Vescio et al., 2008).

Collectively, the results demonstrate that high collegial cohesion coexists with high-quality PLC implementation, with professional development serving as a key enabling factor. The absence of demographic differences reinforces the view that collaboration is sustained through institutional culture, while the strong correlation between cohesion and PLC implementation highlights the pivotal role of relational capital in advancing instructional improvement. These findings contribute empirical support to international literature positioning collegial cohesion as a critical driver of effective PLCs and align with SDG 4 (Quality Education) by emphasizing collaborative teacher learning as a mechanism for sustained instructional quality and equitable educational outcomes.

Discussion

The findings of this study affirm that collegial cohesion is a critical enabler of effective Professional Learning Community (PLC) implementation, reinforcing the view that collaboration in schools is fundamentally relational rather than merely structural. High levels of mutual trust, open communication, and interpersonal support provide the social conditions necessary for teachers to engage in collective inquiry, share instructional vulnerabilities, and sustain reflective dialogue. These results are strongly aligned with Social Capital Theory, which posits that trust-based relationships facilitate the exchange of knowledge and collective action within organizations (Putnam, 2000), as well as with Communities of Practice theory, which emphasizes learning as a socially situated process embedded in shared practice and meaning-making (Wenger, 1998). When teachers experience psychological safety and professional respect, PLCs are more likely to move beyond compliance-oriented meetings toward authentic instructional collaboration.

The absence of significant differences in collegial cohesion across demographic variables further suggests that cohesion functions as an institutional and cultural attribute, rather than an outcome of individual teacher characteristics. This finding supports prior research indicating that collaborative cultures are shaped primarily by school leadership, shared norms, and organizational routines, rather than age, gender, or length of service (Hargreaves & O'Connor, 2018; Louis & Marks, 1998). In schools where collaboration is embedded in everyday practice, teachers regardless of background are socialized into shared expectations of trust, participation, and collective responsibility for student learning.

Moreover, the strong positive association between collegial cohesion and PLC implementation highlights that collaboration flourishes when relational conditions are intentionally cultivated. This result corroborates empirical studies demonstrating that PLC effectiveness is significantly higher in schools characterized by strong relational trust and supportive professional climates (Vescio, Ross, & Adams, 2008; Bryk & Schneider, 2002). Without such relational foundations, PLCs often remain superficial, fragmented, or short-lived, even when supported by policy mandates.

Consistent with previous literature, professional development exposure emerged as a key differentiator in PLC implementation, underscoring the importance of sustained, practice-

linked training. Research shows that professional development is most effective when it is collaborative, job-embedded, and aligned with PLC goals, enabling teachers to develop shared language, instructional coherence, and collective efficacy (Darling-Hammond et al., 2017; Stoll et al., 2006). Together, these findings suggest that strengthening PLCs requires a dual focus on relational capacity-building and continuous professional learning, positioning collegial cohesion as a strategic lever for sustaining collaborative school improvement and advancing quality education.

Conclusion and Implications

This study concludes that collegial cohesion is a decisive factor in the successful and sustainable implementation of Professional Learning Communities (PLCs) in public elementary schools. Strong relational foundations characterized by trust, open communication, interpersonal support, and shared responsibility create conditions that enable meaningful collaboration, reflective professional dialogue, and a collective focus on student learning outcomes. These relational elements function not merely as supportive conditions but as structural enablers of PLC effectiveness, directly influencing how teachers engage in joint inquiry, instructional planning, and data-informed decision-making.

The findings underscore that PLC implementation cannot be reduced to structural compliance or procedural adoption. Rather, collaboration flourishes when relational capital is intentionally cultivated through leadership practices that value teacher voice, psychological safety, and shared ownership of instructional improvement. The absence of significant demographic differences further suggests that collegial cohesion operates as an institutional and cultural attribute, transcending individual teacher characteristics and reinforcing the role of school-wide norms and leadership in shaping professional learning.

For school leaders and policymakers, these results highlight the importance of relational leadership, the allocation of protected time for collaborative work, and targeted professional development that strengthens both instructional competence and interpersonal capacity. The proposed C2I (Collegial Cohesion-to-Implementation) Framework offers a practical and context-sensitive model for embedding relational cohesion within PLC structures, ensuring that collaborative practices are both systematic and sustainable.

Ultimately, advancing collegial cohesion as a core dimension of PLC implementation contributes directly to Sustainable Development Goal 4 (Quality Education) by strengthening teacher professionalism, improving instructional coherence, and fostering continuous, school-based professional learning. By empowering teachers through collaborative cultures grounded in trust and shared purpose, schools are better positioned to deliver equitable, high-quality learning experiences for all learners.

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