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Collaborative school management model for teaching performance in primary-level educational institutions in Cajamarca, 2025

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Abstract: This study, aligned with Sustainable Development Goal 4 (quality education), aimed to design and validate a collaborative school management model to strengthen teaching performance in public primary-level educational institutions in Cajamarca during 2025. The research followed a quantitative, basic approach, with a non-experimental, cross-sectional design and a descriptive–propositional scope. The population consisted of 603 teachers from public institutions in the province of Jaén, and a sample of 60 teachers was selected through non-probabilistic convenience sampling. Data were collected using a survey technique, applying a 30-item Likert-type questionnaire structured around the dimensions of collaborative school management (leadership, joint work, and planning) and teaching performance (pedagogical performance, lesson execution, and innovation resources). Data analysis was conducted using SPSS v27 through descriptive statistics. The findings revealed predominantly high levels of teaching performance, particularly in pedagogical performance (53.33%), lesson execution (41.67%), and innovation resources (30.00%), although some teachers remained at process and insufficient levels. Based on this diagnostic evidence, a Collaborative School Management Model was developed and validated through expert judgment using a Delphi-type process, achieving high consensus. The study concludes that collaborative management constitutes a viable strategy for improving teaching performance, with significant implications for strengthening institutional practices in similar public educational contexts.

Keywords: *Collaborative school management, Collegial planning, Distributed leadership, Formative assessment, Primary education, Teaching performance.*

1. Introduction

Concern for teaching performance has remained constant in contemporary educational debates due to the central role teachers play in planning, implementing, and assessing learning. In contexts where schools face structural constraints, such as limited infrastructure, territorial dispersion, or unequal access to training and technology, the quality of teaching largely depends on institutional capacity to sustain continuous improvement processes. In this framework, Sustainable Development Goal 4 emphasizes the need to ensure inclusive, equitable, and quality education, highlighting the urgency of strengthening teacher training and professional development as a condition for achieving meaningful learning. International reports have also warned that many education systems lack clear professional development policies and collaborative structures to ensure sustained improvement in teaching, making the construction of management models that promote collegial work and shared leadership particularly relevant [1-4].

In Latin America, difficulties related to improving teaching performance are intensified when training gaps, complex working conditions, and school management models centered on rigid hierarchical structures converge. In such contexts, teacher training is often fragmented, consisting of isolated professional development actions that do not always translate into sustainable classroom transformations. In the Peruvian case, teaching performance has been identified as a persistent issue

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across different institutional levels, associated with limitations in planning, pedagogical leadership, organizational climate, professional mentoring, and digital competencies, especially following the health crisis, which exposed inequalities and deficiencies in the pedagogical use of technological resources. This scenario suggests that improvements cannot be sustained solely through individual demands on teachers, but rather through organizational redesigns that enable conditions for learning in the community, sharing practices, providing feedback, and agreeing on common pedagogical standards [5-9].

In Cajamarca, these tensions become more complex due to the presence of multigrade schools, dispersed rural settings, and material limitations that hinder the implementation of regular mentoring and training processes. Although there are teachers with outstanding performance, schools often lack mechanisms to transform these practices into transferable experiences for other teachers, creating an internal gap: some teachers advance through individual initiative, while others remain at process or insufficient performance levels. This heterogeneity affects the coherence of educational services, as teaching quality becomes dependent on individual action rather than on a shared professional culture. Consequently, there is a need to propose a collaborative school management model that articulates collegial planning, pedagogical mentoring, and distributed leadership as sustainable institutional pillars [10-13].

From a theoretical perspective, the study was grounded in Bolden's distributed leadership theory, which posits that institutional leadership should not be concentrated solely in the figure of the principal, but rather distributed across the educational community through active participation, shared decision-making, joint work, and co-responsibility. This approach is relevant because it explains how pedagogical improvement is strengthened when leadership is exercised as a collective practice, with teachers assuming pedagogical leadership roles within teams and school leadership acting as a facilitator of organizational conditions. Complementarily, the study adopted the human capital theory developed by Pérez and Castillo, which argues that job performance is the cumulative result of training, experience, and professional development opportunities. From this perspective, demanding results without investing in institutional conditions and support structures is insufficient; instead, environments must be created where professional capital is strengthened through interaction, mentoring, and reflection [6, 14-17].

Based on these considerations, the research question was formulated as follows: How would a collaborative school management model strengthen teaching performance in public primary-level educational institutions in Cajamarca in 2025? Accordingly, the general objective was to design and validate a collaborative school management model aimed at strengthening teaching performance. The specific objectives were to diagnose the level of teaching performance by dimensions, determine the key characteristics of the model based on identified needs, and theoretically validate the model through expert judgment. The study was theoretically justified by its contribution to understanding the relationship between school management and teaching performance from a collaborative perspective; methodologically, by structuring an instrument and a validation process; and practically, by proposing a viable and transferable model for institutions with similar conditions [18-20].

2. Method

2.1. Type of Study and Design

The research followed a quantitative, basic approach aimed at describing the state of teaching performance and constructing an organizational model proposal. A non-experimental, cross-sectional design was used, as data were collected at a single point in time without manipulating variables. The scope was descriptive–propositional: descriptive due to the performance diagnosis, and propositional due to the development of the collaborative school management model as a structured response to identified needs [21, 22].

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2.2. Population and Sample

The study population consisted of 603 primary-level teachers from public educational institutions in the province of Jaén, Cajamarca region, according to institutional records. The sample included 60 teachers selected through non-probabilistic convenience sampling due to access conditions, time constraints, and availability for instrument administration. Inclusion criteria focused on active primary-level teachers in 2025 who voluntarily agreed to participate, while exclusion criteria applied to teachers on extended leave or under administrative processes that prevented regular participation [21, 22].

2.3. Instrument

Data were collected using a survey technique through a 30-item Likert-type questionnaire. The instrument was constructed based on two main variables. The dependent variable, teaching performance, was conceptualized as the level of effectiveness with which teachers plan, implement, and assess their classroom work while integrating relevant resources and strategies. Its dimensions were defined as pedagogical performance, lesson execution, and use of innovative resources. The independent variable, collaborative school management, was defined as the set of participatory and co-responsible actions that articulate planning, decision-making, and pedagogical improvement through shared leadership. Its dimensions were leadership, joint work, and planning. The instrument underwent content validation through expert judgment, assessing relevance, clarity, and coherence of the items. Additionally, the proposed model was validated in stages through a Delphi-type procedure to achieve consensus and conceptual consistency [18, 23-25].

2.5. Data Collection Procedure

Data processing was conducted using SPSS v27. Descriptive statistics, frequencies, and percentages were applied to characterize teaching performance dimensions. Scoring scales were established to classify results into four levels: insufficient, process, satisfactory, and outstanding, facilitating diagnostic interpretation. Normality tests (Kolmogorov–Smirnov) were also considered to determine the suitability of inferential analyses if relationships between variables were to be explored. Ethical considerations included scientific integrity, voluntary participation, confidentiality, anonymity, and the avoidance of identifiable information ensuring that participation had no labor or evaluative implications [21, 22].

2.7. Ethical Considerations

Participation was voluntary and based on informed consent. Participants were informed about the purpose of the study, confidentiality measures, and their right to withdraw at any time. No personally identifiable information was collected, and it was emphasized that participation involved no academic or professional penalties [26, 27].

3. Results

3.1. Overall Level of Teaching Performance

Table 1.
Teaching performance level.

Level	Number of Teachers	Percentage (%)
Insufficient	5	8.33
Process	5	8.33
Satisfactory	18	30.00
Outstanding	32	53.33

The results show a predominance of the outstanding level (53.33%), followed by the satisfactory level (30.00%). However, a minority group (16.66%) remains at the process and insufficient levels, indicating the need for targeted support.

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3.2. Dimension: Lesson Execution

Table 2.
Lesson execution.

Level	Number of Teachers	Percentage (%)
Insufficient	3	5.00
Process	4	6.67
Satisfactory	28	46.67
Outstanding	25	41.67

A concentration at satisfactory and outstanding levels (88.34%) is observed, suggesting relatively consistent lesson execution, although a small segment requires mentoring.

3.3. Dimension: Innovation Resources

Table 3.
Innovation resources.

Level	Number of Teachers	Percentage (%)
Insufficient	1	1.67
Process	5	8.33
Satisfactory	36	60.00
Outstanding	18	30.00

The satisfactory level predominates (60.00%), indicating acceptable use of innovation resources, though not yet fully consolidated as outstanding in most cases.

3.4. Dimensional Balance

Table 4.
Overall balance by dimensions.

Dimension	Insufficient (%)	Process (%)	Satisfactory (%)	Outstanding (%)
Pedagogical performance	8.33	8.33	30.00	53.33
Lesson execution	5.00	6.67	46.67	41.67
Innovation resources	1.67	8.33	60.00	30.00

The profile shows strengths in pedagogical performance and lesson execution, while innovation resources present more cases at the satisfactory level, indicating room to scale toward more consistent innovative practices.

3.5. Implications for Model Design

Based on the diagnosis, the Collaborative School Management Model was structured around three articulated components.

1. Collegial planning (weekly coordination cycles, lesson construction, and review of achievements).
2. Peer mentoring (formative observation, dialogue tables, and horizontal feedback).
3. Distributed leadership and roles (principal as facilitator; teachers as pedagogical leaders; institutional co-responsibility).

The model was operationalized through phases of diagnosis, design, validation, and feedback, prioritizing collaborative culture, horizontal communication, and non-punitive formative assessment.

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3.6. Validation through Expert Judgment

The proposal was validated through a structured Delphi-type process in two stages: instrument validation and model validation. High consensus was reported with maximum scores across evaluated dimensions.

Table 5.
Validation results.

Stage	Average Score
Stage 1 (Instrument)	96/96
Stage 2 (Model)	96/96

4. Discussion

The diagnostic findings revealed a clear predominance of satisfactory and outstanding performance levels, particularly in pedagogical performance and lesson execution, which suggests the existence of a favorable professional foundation among the evaluated teaching staff. This outcome indicates that most teachers have consolidated core pedagogical competencies and accumulated sufficient professional experience to conduct teaching processes aligned with established curricular and instructional standards. Such a foundation constitutes a valuable asset for institutional improvement efforts, as it reduces resistance to change and provides a baseline upon which more advanced pedagogical practices can be developed.

However, while this favorable base represents an important strength, it does not by itself guarantee sustained improvements in educational quality. Teaching performance is a dynamic and evolving construct that requires continuous updating, reflection, and adaptation to changing student needs, curricular demands, and technological contexts. Without deliberate strategies that promote ongoing professional growth, even teachers with solid initial competencies may experience stagnation, limiting the long-term impact on student learning outcomes.

At the same time, the presence of considerable percentages of teachers in the process and insufficient levels confirms that teaching quality is not homogeneous across the institution. These gaps reflect disparities in the mastery of didactic strategies, lesson planning, classroom management, and learning assessment practices. Such differences can generate unequal learning opportunities for students and undermine efforts to achieve institutional coherence in pedagogical approaches.

The persistence of these lower performance levels also reveals that, in the absence of strong institutional structures for mentoring, feedback, and professional support, performance gaps tend to remain over time. When improvement efforts rely primarily on individual initiative rather than collective systems, teachers who face greater difficulties often lack the guidance needed to overcome them. As a result, disparities may deepen, negatively affecting both educational equity and overall school effectiveness.

This pattern aligns with theoretical and empirical perspectives that emphasize that teaching performance is not strengthened solely through isolated external training activities. Instead, it is reinforced through internal routines of professional collaboration that embed learning within daily practice. By transforming classroom experiences into objects of shared analysis, collaborative structures promote reflective dialogue, peer feedback, and the collective construction of pedagogical knowledge. Research consistently shows that professional learning communities generate more sustained and meaningful impacts than traditional, episodic training models [3, 20, 28].

From the perspective of distributed leadership theory, both the diagnostic results and the proposed improvement model are coherent. Teaching performance improves more effectively when leadership responsibilities are shared rather than concentrated exclusively in school administrators. This approach encourages a shift away from rigid hierarchical structures toward participatory dynamics, in which teachers actively engage in pedagogical decision-making and assume shared responsibility for institutional outcomes.

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Within the proposed model, school leadership is conceived not as a controlling authority but as a facilitator of processes and a creator of enabling conditions. Teachers, in turn, are positioned as central agents of educational improvement rather than passive recipients of directives. This configuration strengthens pedagogical co-responsibility, professional cohesion, and the development of an institutional culture oriented toward continuous learning and improvement. Empirical evidence suggests that such leadership models enhance school effectiveness by fostering trust, collaboration, and a shared educational visión [6, 14].

Complementarily, human capital theory provides a useful framework for understanding teaching performance as an accumulative process that requires organizational conditions to remain productive. Knowledge, experience, and pedagogical skills only generate value when institutions create mechanisms to update, share, and apply them systematically. The proposed model addresses this requirement by incorporating pedagogical mentoring, collegial planning, and formative assessment as strategic forms of institutional investment in professional development [16, 17, 29].

Furthermore, analysis of the innovation resources dimension revealed a predominance of satisfactory rather than outstanding levels, indicating that pedagogical innovation has been adopted but not yet fully consolidated. This situation is commonly explained by barriers such as unequal access to digital technologies, limited technical and pedagogical support, and the lack of structured spaces for sharing innovative practices. To address these limitations, the model promotes the exchange of good practices and the development of institutional repositories, allowing innovation to expand through peer learning rather than isolated experimentation [7, 9, 30, 31].

Overall, the diagnostic results and the proposed model suggest that the Cajamarca region requires fewer isolated interventions and greater emphasis on structured, institutionalized mechanisms for continuous improvement. Expert validation reinforces this conclusion, highlighting the relevance, coherence, and feasibility of the proposal within the local educational context. Its implementation depends more on internal reorganization, effective pedagogical leadership, and sustained institutional commitment than on extraordinary financial investment, positioning it as a sustainable and scalable alternative for strengthening teaching performance and educational quality [19, 32, 33].

5. Conclusions

It was concluded that the collaborative school management model has the potential to strengthen teaching performance in primary-level educational institutions in Cajamarca in 2025, as it organizes an institutional system based on distributed leadership, collegial planning, peer mentoring, formative assessment, and continuous feedback. The diagnosis revealed a predominance of high performance levels, with 53.33% at the outstanding level in pedagogical performance, although a minority group remains at process and insufficient levels requiring support. The proposed model responds to real contextual needs by prioritizing sustained professional interaction, horizontal collaboration, and the collective construction of pedagogical practices over isolated theoretical training. Finally, expert validation demonstrated conceptual coherence, relevance, and feasibility of the model, achieving full consensus and a maximum rating (96/96), supporting its progressive applicability and transferability to similar educational contexts [14, 18, 29, 34].

6. Recommendations

It is recommended that the Regional Government of Cajamarca formally incorporate the proposed model as a regional guideline for improving teaching performance, ensuring its articulation with existing educational policies and development plans. This incorporation should be supported through normative instruments that institutionalize collegial planning, guaranteeing protected and scheduled coordination time within the school calendar. By formalizing these collaborative spaces through regional directives, schools would be better positioned to move from isolated individual practices toward collective pedagogical reflection aligned with regional educational priorities.

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Additionally, it is recommended that the Local Educational Management Units (UGEL) implement a pilot plan that operationalizes the model at the school level. This pilot should include structured peer observation processes, the use of formative checklists aligned with the framework for good teaching performance, and the definition of classroom-level improvement indicators. Such mechanisms would allow teachers to receive constructive feedback focused on pedagogical growth rather than sanctions, while also generating evidence to monitor progress and inform decision-making. Ensuring organizational continuity of these actions across academic years is essential to prevent the dilution of their impact.

Furthermore, it is recommended that the Ministry of Education develop and disseminate an official guide that explicitly promotes distributed leadership, collaborative planning, and non-punitive formative teacher monitoring. This guide should provide practical orientations, examples, and adaptable tools that respond to the diverse realities of Peruvian schools, particularly multigrade and rural institutions. By recognizing contextual diversity, the Ministry can facilitate more equitable implementation of improvement strategies and avoid one-size-fits-all approaches that often limit effectiveness in rural settings.

In addition, the proposed guide should emphasize the role of school leaders as facilitators of professional learning rather than solely as administrative supervisors. Strengthening leadership capacities in this direction would contribute to building trust among teachers and encourage active participation in collective improvement processes. Training programs for principals and pedagogical coordinators should, therefore, be aligned with this vision, reinforcing skills related to coaching, feedback, and collaborative management.

Finally, it is recommended that the Regional Directorate of Education standardize mechanisms for pedagogical coordination, feedback, and continuous internal professional development across schools in the region. This standardization should not imply rigidity but rather the establishment of minimum shared criteria that ensure coherence and sustainability. By promoting a collaborative professional culture supported by clear institutional frameworks, the region can create favorable conditions for sustained teaching improvement over time, ultimately contributing to more equitable and higher-quality educational outcomes [5, 13, 35].

Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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