

The Continuing Professional Development of Teachers in Multigrade Schools in the Canton of Milagro, Province of Guayas.

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Abstract

Keywords:

continuing professional development; multigrade schools; rural teacher; training model.

This article is the result of doctoral research related to the training of teachers working in rural multi-grade schools, a crucial factor for educational quality, especially in contexts characterized by simultaneous grade levels, diverse learning paces, and limited availability of pedagogical resources. In the Milagro canton, Guayas province, these conditions create scenarios of high professional demand that have not always been met through relevant and sustained training processes. Therefore, this study sought to establish a pedagogical model for ongoing professional development for teachers working in these educational institutions, with the aim of contributing to the improvement of their professional performance. The study was conducted using a mixed-methods approach, with a descriptive-interpretive design and an action-research method. The population consisted of teachers from these schools in the Milagro 09D17 Educational District; the sample included 20 practicing teachers and five key

informants, experts in teacher training, rural education, and educational management. The survey and semi-structured interview techniques were used to collect information, and the instruments were validated through expert review. The data obtained revealed a teacher training system characterized by homogeneous approaches, low continuity, and limited local pedagogical support, forcing teachers to rely primarily on individual experience and self-directed learning. Based on these findings, a pedagogical model of ongoing, situated, continuous, and collaborative professional development was developed. This model aims to integrate teaching practice, pedagogical support, and professional reflection as key elements for development in rural, multi-teacher contexts.

INTRODUCTION

Teacher professional development is a decisive factor in the quality of educational processes, particularly when teaching is carried out in contexts that present complex pedagogical and organizational conditions. In multigrade schools, where teaching work implies the simultaneous attention of students of different grades and levels within the same learning space, continuing professional development ceases to be a complement and becomes a structural necessity for the effective management of the multigrade classroom and contextualized pedagogical decision-making.

In the Ecuadorian context, although the regulatory framework recognizes education as a fundamental right and upholds principles of equity, inclusion, and quality, evident gaps persist in practice between general educational policies and the real conditions in which teachers in multigrade schools work, especially in rural territories. As Burgos, Burgos, and Cedeño warn, the national education system is advancing in access and coverage but faces difficulties in sustaining continuous training processes that effectively respond to the particularities of non-graded educational contexts.

Academic evidence agrees that current teacher training continues to respond to homogeneous and poorly contextualized approaches, designed mostly from urban and graded logics, which limits its relevance for pedagogical work in multigrade classrooms. This misalignment is expressed in the absence of systematic attention to critical components of multigrade performance, such as differentiated planning, pedagogical time management, curricular articulation between grades, flexible evaluation, and the design of contextualized didactic resources; precisely the elements that support teaching in heterogeneous scenarios.

In this scenario, the rural multigrade teacher is often forced to construct much of their pedagogical practice from individual experience, self-training, and informal exchange with other colleagues, given the insufficiency of institutionalized programs of support and continuing professional development adapted to their reality. In this line, Morales and Pérez argue that professional development cannot be understood in

isolation, but as a situated process, influenced by institutional culture, school dynamics, and the relationships established with the educational community and the territory.

This problem is manifested with particular intensity in the Canton of Milagro, Province of Guayas, where a significant part of institutions operate under a multigrade modality and face limitations associated with access to specialized training, low continuity of training processes, and the absence of systematic mechanisms for monitoring and evaluating teaching practice. Although the Ministry of Education of Ecuador recognizes the need to strengthen education in single-teacher, two-teacher, and multi-teacher contexts through methodological guidelines, these initiatives are still insufficient to respond to the real demands of teaching in the multigrade classroom, particularly when territorial barriers, institutional weaknesses, and connectivity restrictions typical of rural areas concur.

Considering the above, continuing professional development in multigrade schools is not conceived as a set of isolated actions, but as a continuous process, contextualized and articulated to daily pedagogical practice. Consequently, it becomes necessary to rethink traditional approaches to continuing education and move towards situated pedagogical models that start from real training needs, incorporate pedagogical support in the territory, and promote sustained dynamics of reflection and professional collaboration. This challenge is sustained not only as an academic requirement but as an ethical and educational necessity aimed at guaranteeing pertinent and quality education for historically underserved rural communities. In this framework, this article aims to substantiate a pedagogical model of continuing professional development, specifically oriented to teachers of multigrade schools in the Canton of Milagro, Province of Guayas, with the purpose of contributing to the improvement of their professional performance.

To advance this purpose, the discussion is supported by accumulated knowledge on teacher continuing professional development and rural pedagogy, which allows understanding the tensions and limitations of traditional approaches vis-à-vis the demands of the multigrade context. Teacher continuing professional development has been addressed in specialized literature as a key process for improving educational quality, particularly in contexts characterized by complex and heterogeneous pedagogical conditions. Various studies agree that traditional training models, focused on isolated, homogeneous, and predominantly theoretical actions, present serious limitations in responding to the real demands of teaching practice in rural and multigrade environments (Robalino, 2017; Almoguea et al., 2019; Cano, 2021; Landa-García & Méndez-Ojeda, 2025; Qangule & Letuma MC 2025). These limitations are expressed in the scarce transfer of training learning to daily pedagogical practice and in the weak articulation between training content and real classroom dynamics.

From a situated perspective, teacher professional development cannot be understood as a process isolated from the context in which teaching is practiced; thus, Morales and Pérez argue that continuing professional development is configured from the interaction between institutional culture, the organizational conditions of the school, and the relationships established with the educational community and the territory. This conception is relevant in multigrade schools, where the teacher simultaneously assumes multiple pedagogical, administrative, and community functions, which requires differentiated professional competencies and training processes adapted to such complexity (Burgos et al., 2020; Pallchisaca Suquilanda, 2021; Portilla et al., 2025).

In the field of rural education, various authors warn that current teacher training

continues to reproduce standardized approaches, designed from urban and graded logics, which do not systematically consider the particularities of the multigrade classroom. Thus, it cannot be denied that there is a disconnection between the training offer and the concrete educational reality, generating significant gaps in fundamental aspects of professional performance, such as multilevel planning, pedagogical time management, differentiated evaluation, and curricular articulation between grades, essential elements for guaranteeing pertinent teaching-learning processes in multigrade contexts (Ríos Cepeda & Arán Sánchez, 2022; Rodríguez et al., 2021; Felix, 2024).

At the Latin American level, research production on teacher training in rural and multigrade contexts shows still incipient advances; in this regard, Flores et al. and Padilla Eras point out that, although there is growing recognition of the need for contextualized training approaches, gaps persist both in the design of public policies and in the implementation of sustained continuing professional development programs aimed at rural teachers (Flores et al., 2021; Padilla Eras, 2024). For his part, Pallchisaca mentions that these limitations are aggravated by structural factors such as territorial dispersion, the precariousness of educational infrastructure, and connectivity restrictions, which hinder equitable access to continuous training processes.

In relation to this, the literature on rural education emphasizes that continuing professional development models oriented to multigrade contexts must explicitly consider key pedagogical dimensions, such as multilevel planning, integrated curriculum management, differentiated evaluation, and the strategic use of contextualized didactic resources. Villarroel Idrovo and Coello Díaz agree in pointing out that the absence of these dimensions in training processes limits the teacher's ability to respond effectively to the diversity of paces and levels present in the classroom, which reinforces the need for pedagogical models specific to the reality of the context.

Along these lines, teacher continuing professional development acquires greater impact when it incorporates pedagogical support as a structural component of the training process; regarding this, Davini argues that support allows transforming training into a space for situated reflection on practice, favoring informed pedagogical decision-making and the construction of collective professional knowledge. In rural contexts, where teacher isolation constitutes a recurrent condition, this component acquires strategic value to sustain training processes with real impact in the classroom.

Flores et al. warn that the weakness of numerous continuing professional development programs lies in the absence of comprehensive pedagogical models capable of articulating training with practice and context. As a result, training processes tend to fragment into disconnected actions, with little impact on teaching performance. Padilla Eras complements this approach by pointing out that, in rural territories, the lack of situated models deepens the gaps between policy guidelines and daily educational reality.

In the Ecuadorian case, the continuing education of teachers in multigrade schools continues to be a structural debt of the education system; despite the existence of regulatory frameworks that recognize the diversity of educational modalities, the absence of specific programs and differentiated pedagogical models limits the possibility of effectively addressing the training demands of the rural teacher. This situation reinforces the need to rethink continuing professional development processes from a territorially situated perspective, capable of articulating theory, practice, and context.

Although the regulatory framework recognizes the diversity of educational

modalities and the need to strengthen rural education, academic evidence shows that continuing professional development processes still lack pedagogical models specifically designed for teachers in multigrade schools. García argues that this absence limits the coherence between educational policies and training practices implemented in the territory, reproducing generalist schemes that do not respond to the complexity of the multigrade classroom. Similarly, Arévalo and Félix (2024) warn that teacher training in rural contexts requires pedagogical frameworks that recognize the territorial and professional specificity of the teacher, avoiding the uncritical application of models designed for urban contexts.

In this sense, the construction of pedagogical models of continuing professional development oriented to multigrade schools is configured as a need derived from the analysis of the educational context and professional teaching performance itself. The reviewed literature agrees that such models must articulate pedagogical principles, training strategies, and support mechanisms that allow strengthening teaching practice from a situated, collaborative, and reflective logic, aligned with the real demands of the multigrade classroom and the territory in which the school is inserted.

The educational reality of the Canton of Milagro highlights that the professional development of the multigrade teacher cannot be analyzed outside of the material, institutional, and territorial conditions in which teaching is practiced. Although the canton has experienced sustained growth and an expansion of its educational offer, rural schools continue to face structural limitations that directly affect daily pedagogical work. The presence of insufficient infrastructure, unstable connectivity, and limited didactic resources configures scenarios in which multigrade teaching takes place under conditions of high professional demand, with little effective institutional support.

These conditions directly impact access to and continuity of continuing professional development processes; it is necessary to mention that, in rural contexts, the possibility of participating in training programs does not depend solely on the existing offer, but on factors such as geographical distance, time availability, technological connectivity, and content relevance. As Badano and Ríos point out, historical structural inequalities have conditioned the real access of rural teachers to professional development opportunities, generating fragmented training trajectories with low impact on pedagogical practice.

In rural multigrade schools, these limitations are intensified due to the inherent complexity of the multigrade classroom; the teacher not only faces age and curricular diversity but must simultaneously assume pedagogical, administrative, and community functions. However, available training programs continue to be designed, for the most part, from standardized parameters responding to urban and graded contexts, without considering the specific dynamics of the rural classroom. Mena et al. warn that this lack of correspondence between training and practice generates a significant gap in the professional performance of the multigrade teacher and deepens inequalities between territories.

From an institutional perspective, Cabrera and Tello highlight that the absence of educational policies sensitive to territorial diversity limits the construction of coherent training trajectories for rural teachers; according to the authors, when continuing professional development does not recognize the particularities of the multigrade context, a logic of generalist training is reproduced that reduces pedagogical relevance and weakens the teacher's ability to respond to the real demands of their school environment. This situation translates into a practice sustained, in many cases, by

personal commitment and accumulated experience rather than by systematic professional support.

Institutional precariousness is also manifested in the lack of materials, the scarce stability of teaching teams, and the limited articulation between school and education system; according to Castro, in this scenario, the multigrade teacher often resorts to self-training strategies and informal exchange with colleagues as the main source of professional learning, while Martínez Barragán highlights that this learning modality, although valuable, does not substitute the need for structured, sustained, and contextualized training processes, and can lead to professional burnout and a sense of isolation.

In this sense, teacher continuing professional development is more effective when it incorporates strategies of pedagogical support, critical reflection on practice, and collaborative work among peers; these training practices contribute to overcoming the instrumental logic of training and favor sustained professional learning processes, linked to the resolution of real problems of the school context and the strengthening of professional teaching identity. For this reason, the discussion on continuing professional development in multigrade contexts has progressively incorporated the analysis of pedagogical models oriented to professional teacher development, understood not as rigid structures, but as frames of reference that articulate principles, strategies, and training processes coherent with educational practice. Robalino argues that continuing professional development models are relevant when they manage to integrate teaching experience, pedagogical reflection, and systematic support, overcoming the logic of episodic training that has historically predominated in Latin American education systems.

Therefore, pedagogical models of continuing professional development must be built upon the teacher's performance context and the specific demands of their professional practice; as Imbernón points out, teacher training acquires greater impact when organized as a continuous, situated, and collaborative process, in which the teacher actively participates in identifying their training needs and constructing contextualized pedagogical solutions; this conception is more significant in multigrade schools, where the complexity of the multigrade classroom demands flexible and adaptive training models.

MATERIALS AND METHODS

The methodological approach of the study combined qualitative and quantitative techniques with a descriptive-interpretive predominance, with the purpose of analyzing the conditions of teaching practice and the demands for continuing professional development in rural multigrade schools in the Canton of Milagro, Province of Guayas. This decision allowed integrating the comprehensive reading of teachers' experiences and perceptions with structured information on training trajectories and institutional conditions, strengthening the consistency of the analysis.

Consistent with this methodological approach, the action-research method was adopted, as it allows transitioning from a critical diagnosis towards the formulation of contextualized proposals and advancing towards the formulation of constructive decisions anchored in educational reality, articulating systematic reflection and intervention without losing academic rigor. This methodological choice proved pertinent in a projective study, the purpose of which was to substantiate a pedagogical model oriented to improving teacher training in rural multigrade contexts, based on a critical reading of the present and a training projection coherent with the conditions of

the territory. Likewise, the action-research method was adopted, as it makes it possible to critically analyze a specific educational reality and, based on said analysis, substantiate a contextualized proposal; this method favored the articulation between theoretical reflection and pedagogical action, especially pertinent in scenarios where the teacher faces multiple demands and limited institutional conditions, as occurs in multigrade schools.

Population and Sample

The population consisted of 39 public rural multigrade schools of the Educational District 09D17 Milagro, with an approximate population of 70 teachers. Through non-probabilistic convenience sampling, 10 educational institutions were selected, grouping 20 teachers, considering criteria of institutional operability, rural location, and willingness to participate. Complementarily, five key informants were interviewed, intentionally selected for their background in teacher training, rural education, or educational management.

Data Collection Techniques and Instruments

Empirical information was obtained from a mixed methodological design; as a quantitative technique, a survey was applied to practicing teachers in rural multigrade schools in the Canton of Milagro, using a structured questionnaire as an instrument, made up of items organized into analytical dimensions aimed at measuring the conditions of teaching practice, training trajectories, and demands for continuing professional development in the multigrade context. As a qualitative technique, the semi-structured interview was used, directed at informants with experience in teacher training and rural education, through a guide designed to deepen the relevance of current training processes, institutional limitations, and pedagogical challenges associated with work in multigrade classrooms.

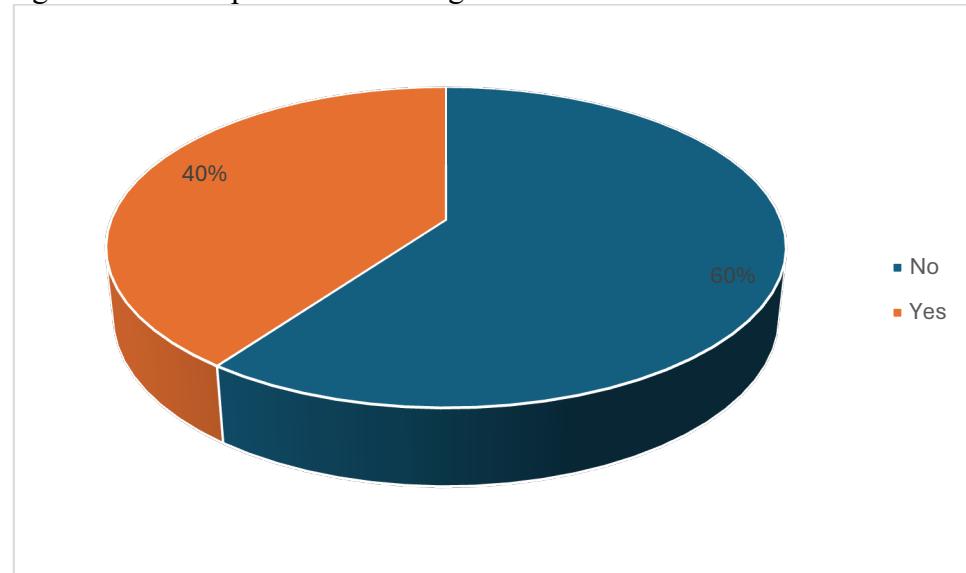
Validity and Reliability

The content validity of the instruments was established through expert judgment, evaluating the clarity, relevance, coherence, and consistency of the instruments with a Likert-type scale, accepting a minimum of 80% positive valuation as a criterion. The reliability of the questionnaire was estimated with Cronbach's alpha in SPSS v.25, reaching a global value $\alpha = 0.87$, considered very good according to classical criteria by George and Mallory and in accordance with what was expressed by Clavijo (2025). These mechanisms strengthened methodological rigor and ensured the internal consistency of the instrument.

Results and Discussion

Empirical evidence reveals that multigrade teaching in rural contexts is configured on a deficient training base; the incorporation of teachers without prior experience or specific preparation for multigrade work constitutes a recurrent feature, which conditions pedagogical practice early on and reinforces dependence on individual adaptive strategies given the complexity of the classroom.

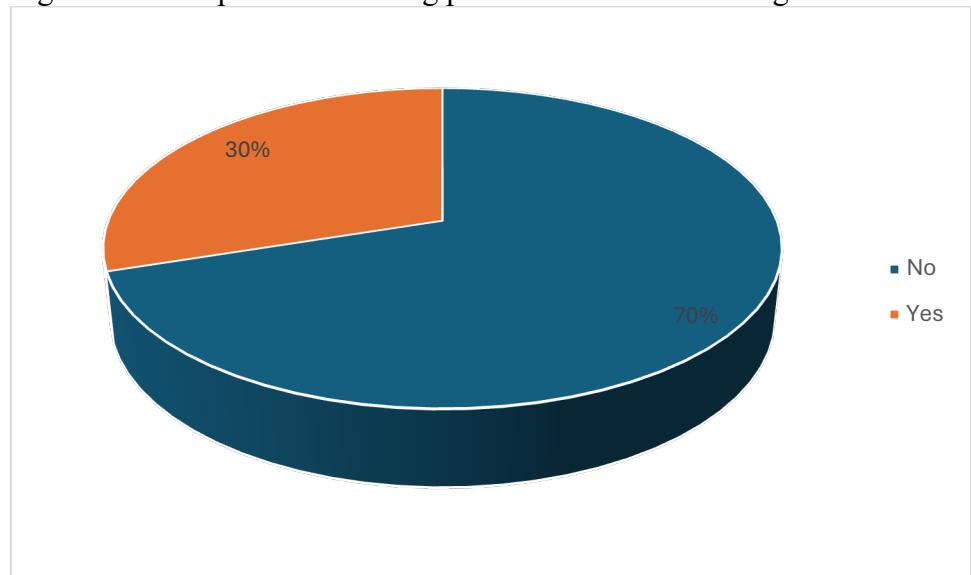
Figure 1. Prior experience in multigrade classrooms.



Note. Prepared by the authors based on surveys applied in District 09D17 (2025).

Figure 1 shows that 60% of teachers did not have prior experience in multigrade classrooms, compared to 40% who did; this result suggests that, in most cases, teacher performance in multigrade contexts is built directly in practice, without initial preparation oriented to managing the simultaneity of grades and levels. The absence of prior experience constitutes a first indication of a structural gap, as it forces teachers to face complex pedagogical scenarios through empirical learning processes, with scarce methodological support.

Figure 2. Participation in training processes related to multigrade education



Note. Prepared by the authors based on surveys applied in District 09D17 (2025).

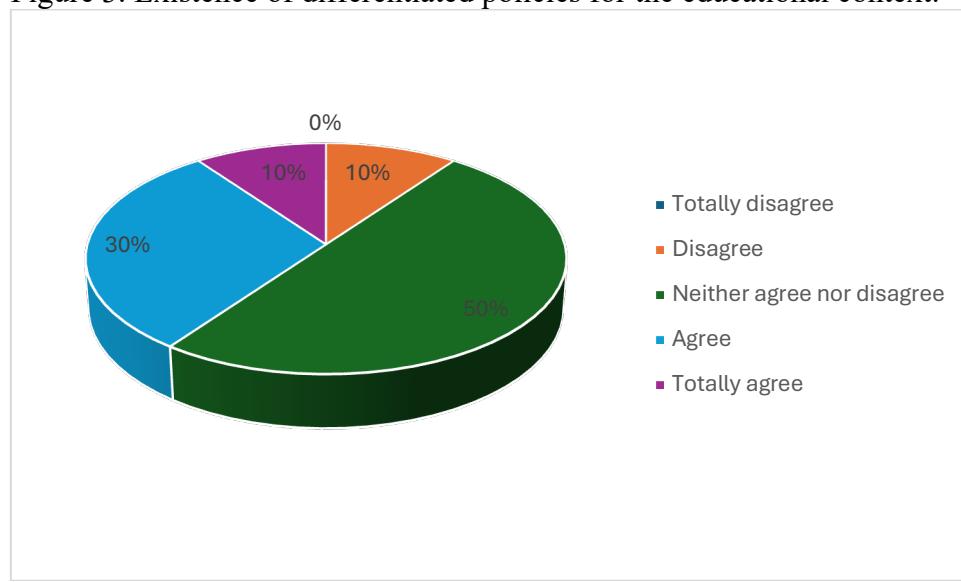
This situation is reinforced by the results presented in Figure 2, where it is observed that 70% of respondents have not participated in training processes related to multigrade education in the last three years; low participation in specialized continuing education instances indicates that the initial lack of experience has not been

systematically compensated through sustained teacher updating policies.

The results configure a critical scenario: a high proportion of teachers start their work in multigrade classrooms without prior experience and, at the same time, remain without regular access to specific training processes. This combination tends to consolidate pedagogical practices based mainly on individual effort and intuitive adaptation, rather than on the mastery of formally acquired didactic strategies.

In this sense, rather than the total absence of actions, what is observed is the weakness of differentiated policies, the presence of access barriers, and discontinuous support, factors that condition the possibility of converting training into a sustained and pertinent process. In relation to differentiated policies, 50% of the teaching staff are in positions of uncertainty regarding their existence, which suggests regulatory invisibility rather than individual ignorance.

Figure 3. Existence of differentiated policies for the educational context.



Note. Prepared by the authors based on surveys applied in District 09D17 (2025).

The results exposed in Figure 3 allow visualizing institutional ambiguity and substantiate the idea of a policy that is not very explicit and weakly communicated. Although general guidelines can be identified, they do not translate into clear or operational orientations for the multigrade context. As a consequence, the implementation of training actions is fragmented, which limits their capacity to consistently guide teaching practice and to guarantee equitable conditions of access to continuing professional development processes.

Complementarily, the data show the persistence of technological and regulatory barriers that restrict effective access to updating processes. 75% of surveyed teachers reported difficulties associated with connectivity, availability of resources, and administrative rigidities, which confirms that access to training does not depend solely on professional motivation. These barriers operate as structural filters that limit participation and reinforce territorial inequalities, especially in rural contexts where the training offer is less diversified.

Regarding institutional support, the results reveal a scenario of unequal and weakly systematized coverage. Although a majority of teachers (65%) acknowledge the existence of certain support mechanisms and perceive some level of managerial backing, these fail to consolidate as a continuous system of technical advice oriented

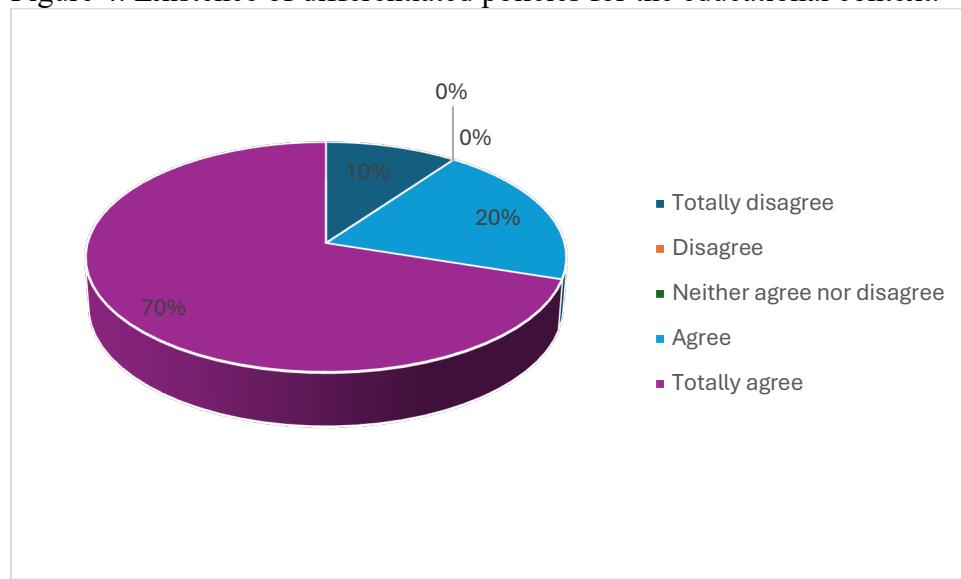
towards pedagogical improvement. This fragility is expressed in the fragmented perception of support, given that 40% of teachers state they have not received advice, which evidences the dependence on isolated initiatives of limited scope.

Added to this is the absence of organizational conditions that sustain training over time: 80% of respondents indicated that they do not have clearly protected institutional spaces or times to participate in training processes. These findings show that support and continuing professional development do not operate as fully assumed institutional responsibilities, but depend, to a large extent, on the individual initiative of the teacher. This situation limits their ability to influence sustainably the improvement of pedagogical practice and consolidates a pattern of discontinuous, fragmented, and low-impact actions, which weakens the coherence of the training system in rural multigrade contexts.

On the other hand, despite the identified training and institutional limitations, the results showed that the rural teaching staff presents a high professional disposition towards learning and improving their practice. This disposition is expressed in high levels of motivation, openness to methodological change, and self-management capacity, configuring a scenario in which the central problem is not the lack of teacher commitment, but the absence of structured training support that channels and potentiates these attitudes.

In terms of motivation, as seen in Figure 4, 90% of surveyed teachers manifested a sustained interest in continuing their training and perfecting their professional performance. This positive orientation towards lifelong learning is accompanied by an almost generalized openness to the incorporation of new methodologies, technologies, and pedagogical approaches. Such results allow ruling out interpretations based on resistance to change and, on the contrary, position the rural teacher as an actor willing to innovate when minimum support conditions are available.

Figure 4. Existence of differentiated policies for the educational context.



Note. Prepared by the authors based on surveys applied in District 09D17 (2025).

However, this disposition is forced to materialize mainly through empirical self-management strategies. The data indicate that a significant proportion of teachers frequently identify gaps in their training and, in response, trace personal routes for professional improvement. This capacity for self-evaluation constitutes a feature of

professional maturity; however, when developed in the absence of systematic support, it tends to translate into fragmented individual efforts, with scarce institutional articulation and limited collective transfer of learning.

Likewise, although 100% of teachers report the frequent use of active and participatory methodologies, the systematicity of these practices depends largely on accumulated experience and personal resource availability, rather than on guided training processes. Pedagogical innovation, in this context, appears as an adaptive response to the complexity of the multigrade classroom but lacks a framework that allows it to be consolidated as a sustained and measurable practice over time. Consequently, the results reveal a central paradox: the education system has highly motivated teachers open to innovation but does not have structured mechanisms to transform that disposition into consistent training processes. This tension anticipates the need for a pedagogical model of continuing professional development that recognizes teacher agency, while providing guidance, support, and institutional coherence.

This analysis was complemented by the criteria of the interviewed education experts, who contributed a situated understanding of the real conditions of teaching practice, the competencies necessary for multigrade work, and the structural limitations that condition professional training in rurality. Far from introducing divergent findings, the testimonies reinforce and make explicit the previously identified gaps, providing key elements for the construction of a pertinent and sustainable pedagogical model of continuing professional development. From the content analysis of the interviews, the following aspects are identified as the most relevant results:

- Structural overload of the teaching role, derived from the simultaneous attention to several grades, subjects, and administrative functions, which limits the time available for planning and pedagogical reflection.
- Scarcity of pedagogical and technological resources, associated with territorial and socioeconomic conditions, which restricts the implementation of active methodologies and forces the development of didactic strategies with minimal or low-cost resources.
- Professional isolation and weak institutional support, expressed in the absence of learning communities, systematic tutoring, and collaboration networks between teachers and managers.
- Insufficient relevance of initial and continuing training, characterized by an urban, monograde, and theoretical approach, poorly aligned with the real demands of the multigrade classroom.
- Explicit demand for practical, situated, and modular training, oriented to the resolution of concrete classroom problems, with pedagogical support and continuous feedback.
- Identification of key competencies for multigrade settings, including multilevel planning, differentiated evaluation, management of simultaneity, community leadership, and digital competence adapted to low-connectivity contexts.

DISCUSSION

The study findings align with the literature warning of the persistent absence of differentiated training approaches for multigrade teaching, despite its structural weight in Latin American education systems. In the Ecuadorian case, Contreras Moina already pointed out the paradox between the high proportion of multigrade schools and the non-

existence of a specific pedagogical model, a situation that continues to reproduce itself and is manifested in homogeneous, poorly contextualized, and limited-scope continuing professional development. This condition reinforces what is described by Portilla et al., who characterize multigrade teaching as an exercise traversed by pedagogical, technological, and structural precariousness.

The distance between educational regulations and teaching practice constitutes a critical axis of the problem. Although the National Training Plan recognizes the need to strengthen professional development, its implementation maintains a generalist logic that does not dialogue with the specific conditions of rurality, as Burgos et al. and Cano warn. This normative-operational gap contributes to training processes not influencing in a sustained manner the improvement of pedagogical practice in multigrade classrooms.

In line with previous studies, initial training appears marked by an urban and theoretical bias that forces rural teachers to build their competencies from experience and self-training, reproducing a pattern also identified in other Latin American contexts. This disengagement between training and practice is deepened by the weakness of support mechanisms and the absence of stable professional networks, which reinforces the teacher isolation noted by Davini and Padilla Eras.

From a broader perspective, the results confirm that continuing professional development in multigrade contexts cannot be reduced to the transmission of technical content. Coinciding with Martínez Barragán and Badano and Ríos, the need emerges for comprehensive training processes that incorporate socio-emotional, cultural, and community dimensions, as well as spaces for critical reflection on practice. Along these lines, the literature agrees that homogeneous models generate low impact, while situated, collaborative, and sustained proposals present greater transformative potential.

Therefore, the convergence between empirical findings and the contributions of authors such as Rodríguez et al., Figueroa Cisneros, Ibarra Vargas, and Avilés et al., allows affirming that the identified limitations do not respond to isolated situations, but to a regional pattern. This scenario reinforces the need to transition towards contextualized continuing professional development approaches, articulated to practice and backed by differentiated educational policies, as a condition to strengthen teaching practice in multigrade classrooms and reduce rural-urban gaps.

Pedagogical Implications for a Pedagogical Model of Continuing Professional Development for Teachers in Multigrade Schools

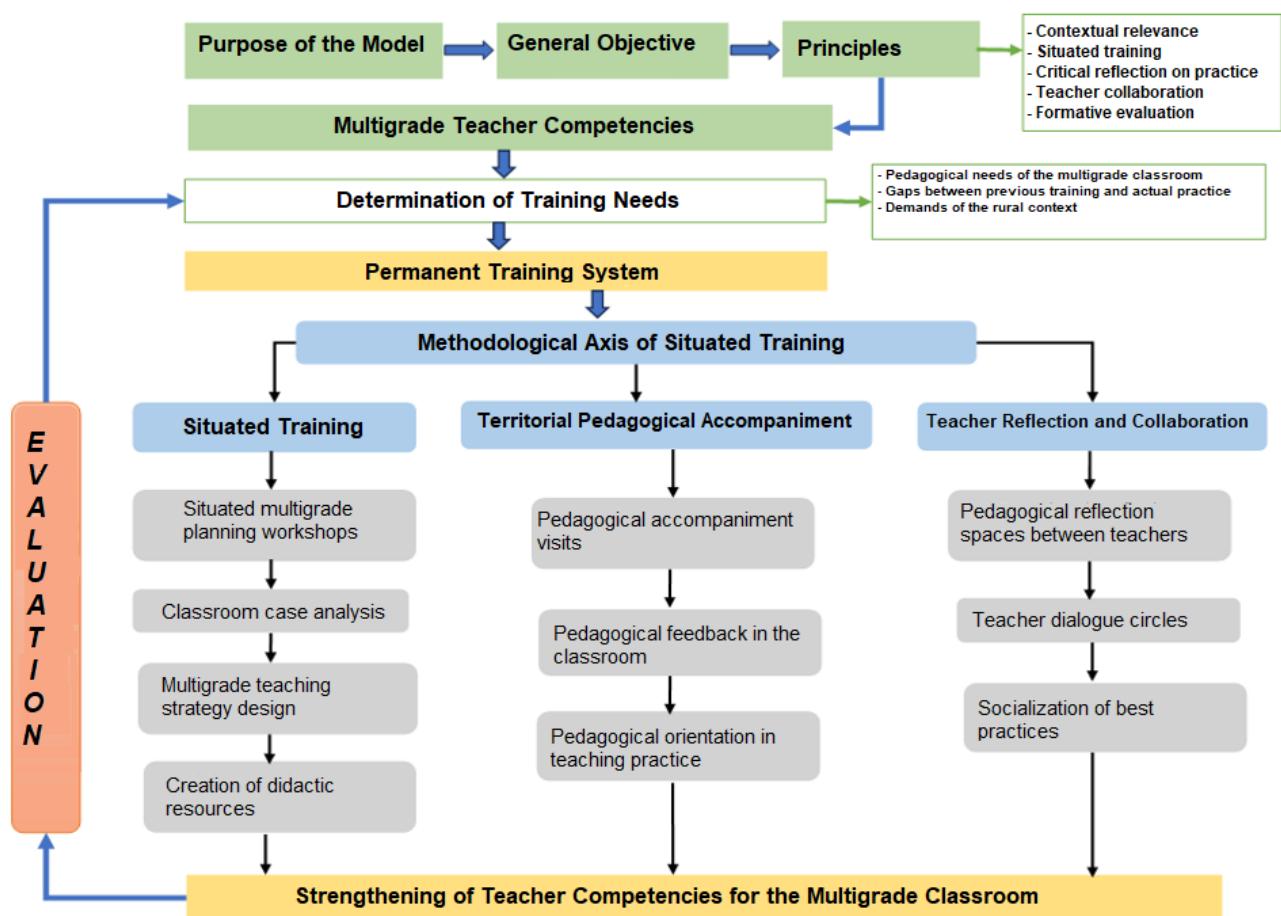
Substantive pedagogical implications emerge from the analysis of the results, guiding the need to rethink continuing professional development in multigrade contexts. Empirical evidence shows that any training proposal directed at these scenarios must start from the explicit recognition of the structural conditions of teaching practice, particularly the overload of functions and the organizational limitations that characterize the rural school. In this framework, training loses meaning when configured as an additional demand and only acquires pedagogical viability when coherently articulated with the real responsibilities of the teacher and the daily dynamics of the multigrade classroom. The results also evidenced the need for situated and eminently practical training approaches, oriented to the resolution of concrete pedagogical problems.

Likewise, it was determined that continuing professional development must be sustained by continuous processes of pedagogical support and collective professional learning dynamics. The lack of systematic monitoring and exchange spaces limits the

possibility of transforming daily experience into consolidated pedagogical knowledge, reinforcing individual and fragmented practices. In this sense, from the integrated analysis of the results, the need to structure a training proposal capable of overcoming the limitations of traditional teacher training approaches in multigrade contexts was derived.

The gaps identified in multigrade planning, attention to the diversity of learning levels and paces, as well as in the pedagogical management of the classroom, evidenced that episodic and decontextualized training schemes were not effective in responding to the complexity of teaching practice in rurality. In this scenario, a continuing professional development approach was configured, oriented to strengthening teacher professional development through a continuous, situated logic articulated to daily practice. The general structure of the model, together with the articulation between its components and processes, was presented synthetically in Figure 5, which allowed visualizing the operating logic that sustained the proposal.

Figure 5. Pedagogical Model of Continuing Professional Development for Multigrade School Teachers in the Canton of Milagro.



Note: Prepared by the authors.

The model was conceived as an organized system of interdependent principles, components, and processes, in which teaching practice constituted the articulating axis of professional learning. From this perspective, the permanent determination of training needs was integrated as a structural and dynamic component, allowing the continuous

identification of emerging pedagogical gaps and guiding training decisions based on the specific conditions of each multigrade school.

On this basis, the model articulated a system of continuing professional development actions oriented to the progressive strengthening of teaching competencies required for the attention of the multigrade classroom. These actions were conceived as coherent and continuous processes, integrated into teaching work, avoiding fragmentation and favoring the direct transfer of learning to pedagogical practice. The methodological axis of situated training played a central role in the proposal, organizing the training process around real problems of the multigrade classroom and ensuring the articulation between pedagogical experience, reflective analysis, and the collective construction of professional knowledge. This axis articulated contextual training, territorial pedagogical support, and collaborative reflection, enabling professional learning to be built in direct interaction with teaching practice.

Complementarily, formative evaluation was incorporated as a transversal axis that regulated the functioning of the model, guiding the processes of monitoring, adjustment, and continuous improvement. From this logic, evaluation was not conceived as a terminal instance, but as a pedagogical resource that permanently fed back the training process and contributed to the sustainability of the model.

CONCLUSIONS

Teacher training in rural multigrade schools in the Canton of Milagro develops in a context marked by structural limitations, territorial isolation, and scarce pedagogical support, conditions that coexist with a strong professional commitment and a close relationship with the community. In this scenario, teaching work is configured as an extended practice that articulates pedagogical, social, and cultural functions, and that demands training processes consistent with the complexity of the multigrade classroom and the realities of the territory. Current training proposals show a significant distance from the concrete demands of teaching practice, maintaining generalist approaches that are poorly compatible with contexts characterized by the simultaneity of grades, the diversity of learning paces, and the management of limited resources. Given this gap, teachers have built pedagogical strategies from experience and peer collaboration, generating situated knowledge that, although key to the sustainability of the practice, remains weakly integrated into institutional training schemes. From this reading, it became necessary to project a continuing professional development model that is articulated with daily practice, incorporates continuous pedagogical support, and enables systematic spaces for reflection and collaborative work. This model is conceived as an integrated training mechanism, oriented to progressively strengthen the professional development of the multigrade teacher and to respond, in a situated and sustainable manner, to the pedagogical demands of the rural context.

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