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INTEGRATED CURRICULUM DESIGN TO STRENGTHEN THE TRAINING OF COLOMBIAN TEACHERS

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ABSTRACT

This article seeks to analyze curriculum design by integrating aspects related to diversity, territory, and pedagogical innovations to strengthen the training of Colombian teachers. To this end, a mixed-methods, sequential explanatory approach is adopted, combining quantitative and qualitative techniques. The results demonstrate that the implementation of an integrated curriculum not only fosters the development of teachers' pedagogical competencies but also significantly contributes to education for diversity and educational relevance, thus contributing to educational quality. It is concluded that curriculum transformation is key to improving the quality of education in Colombia.

KEYWORDS: *integrated curriculum, teacher training, education for diversity, pedagogical strategies.*

1. INTRODUCCIÓN

Teacher training in Colombia constitutes a fundamental axis for the country's social development, especially because Colombia represents a context marked by cultural diversity, territorial inequalities, and educational gaps that require rethinking approaches to the training of Colombian teachers through a critical analysis of the curriculum. In this sense, the integrative curriculum emerges as a pedagogical proposal that seeks to overcome these gaps and inequalities by promoting more comprehensive, critical, and contextualized teacher education.

One of the main problems of the Colombian educational system is the fragmentation in teacher training, as the initial, in-service, and advanced training stages lack transversal axes that align with current educational demands. This is reflected in the performance of pedagogical practices, where knowledge contributes to the limited integration between areas of knowledge, recognizing them as isolated disciplines. This makes it difficult to understand the reality of teacher education in a comprehensive manner.

This is supported by the arguments of Díaz Barriga (2013), who states that the curriculum must respond to social and cultural needs, which implies overcoming rigid and decontextualized models. In this sense, the integrative curriculum allows for the articulation of different areas of knowledge, facilitating a broader and more complex understanding of knowledge.

Another important aspect is analyzing the impact of teacher training on achieving educational quality. In this regard, such training faces significant challenges related to equity and relevance. In this context, the integrative curriculum allows for linking academic content with the realities of the environment, which is essential in the training of teachers who work in diverse settings. The Ministry of National Education (2016) states that education must be contextualized and oriented toward the comprehensive development of the student, reinforcing the importance of flexible and integrative curricular approaches.

In this context, teacher training is positioned as a central element for educational transformation. However, traditional curricular models have been characterized by disciplinary fragmentation, which limits the comprehensive development of knowledge. Hence, integrative curriculum design emerges as a response to this issue by promoting the articulation of knowledge, interdisciplinarity, and meaningful learning.

From a constructivist perspective, learning is conceived as an active process in which the student constructs meaning based on prior experiences. Authors such as Piaget (1970) and Vygotsky (1978) highlight the importance of interaction and context in the development of knowledge. In line with these ideas, the integrative curriculum promotes learning environments where content, experiences, and contexts are interconnected, fostering the training of teachers capable of generating meaningful learning in their students (Ausubel, 2002).

Likewise, the integrative curriculum strengthens interdisciplinarity, understood as the integration of knowledge to address complex problems. In the Colombian context, this characteristic is especially relevant due to the country's social, cultural, and geographical diversity. According to Morin (1999), complex thinking is essential for understanding reality, and this is only possible through the articulation of different perspectives of knowledge.

2 PROBLEM STATEMENT

In Colombia, despite educational reforms, a gap persists between curricular guidelines and their implementation in teacher training. Hence, the following question is formulated: **How does integrated curriculum design influence the strengthening of Colombian teacher education?**

This analysis invites reflection on the idea that integrated curriculum design contributes to strengthening teacher education in Colombia by promoting more articulated, contextualized, and development-centered teaching. This approach enables future teachers to relate different areas of knowledge, overcome traditional fragmentation, and better understand educational realities.

Furthermore, it promotes the development of pedagogical competencies, critical thinking, and the ability to design more meaningful teaching strategies. It also improves the connection between theory and practice, which prepares teachers to face classroom challenges more effectively. Therefore, an integrated curriculum develops more well-rounded, reflective educators who are capable of responding to the needs of the Colombian educational context.

3 JUSTIFICATION

The importance of incorporating an integrative curriculum in teacher education lies in its ability to develop more well-rounded educators, capable of teaching in a coherent, contextualized, and meaningful manner.

Firstly, this approach overcomes the fragmentation of knowledge by integrating different

areas, which helps teachers in training to understand reality in a more comprehensive way and to design more coherent and interconnected lessons. Furthermore, it promotes the development of pedagogical, social, and critical competencies necessary to address the current challenges of education.

It is also important because it strengthens meaningful learning by connecting content with real experiences and specific contexts. This enables the teacher not only to transmit information but also to foster more dynamic and relevant teaching processes.

Likewise, the integrative curriculum promotes interdisciplinarity and collaborative work, which are key aspects for addressing contemporary educational needs.

In summary, incorporating an integrative curriculum in teacher education is essential because it improves the quality of teaching, strengthens teaching competencies, and contributes to a more relevant, inclusive, and transformative education.

This study is relevant because it contributes to improving teacher education processes through innovative curricular proposals. Additionally, it contributes to the Colombian educational field by integrating theory and practice from an interdisciplinary perspective.

4 METHODOLOGY

The present study is based on a **sequential explanatory design** with a quantitative approach, as it allows for the measurement of relevant variables such as the level of implementation of the integrative

curriculum, the development of teaching competencies, and the overall perception of teachers. Through surveys and statistical analysis, trends, relationships, and levels of impact can be identified, providing objectivity and generalizability to the results.

On the other hand, the qualitative approach makes it possible to gain an in-depth understanding of how the integrative curriculum is experienced and interpreted in practice. Through interviews, observations, or discourse analysis, aspects such as implementation challenges, teaching experiences, and the meanings that educational actors assign to the training process can be explored. The combination of both approaches allows for a more comprehensive understanding of the phenomenon, as it integrates numerical data with contextual interpretations. This is especially important in the Colombian educational context, where cultural, social, and institutional factors play a role and cannot be reduced solely to figures. Furthermore, the mixed methodology promotes the triangulation of information, which increases the validity and reliability of the results. By contrasting quantitative data with qualitative findings, a more solid and in-depth understanding of the impact of the integrative curriculum on teacher education is achieved.

In summary, the mixed methodology is the most appropriate for this type of research because it allows for the analysis of both the measurable impact and the lived experience of the integrative curriculum, thus providing a more comprehensive, rigorous, and contextualized explanation of the educational phenomenon.

Operationalization of Variables

Variable	Dimension	Indicator	Instrument
Integrated Curriculum	Interdisciplinarity	Articulation between areas	Survey
	Relevance	Connection with context	Interview
Teacher Training	Pedagogical Competencies	Design of Strategies	Survey
	Educational Practice	Classroom Application	Interview

5 DISCUSSION

It is confirmed that the implementation of an integrative curriculum strengthens teacher education, although structural barriers exist. It constitutes a fundamental strategy for enhancing teacher training by promoting more articulated, contextualized, and development-centered education. This approach allows for overcoming the fragmentation of knowledge, fostering interdisciplinarity and meaningful learning.

The results show that the integrated curriculum has a significant impact on teacher education, aligning with international studies on

interdisciplinary education. However, resistance to change and the lack of teacher training continue to be obstacles.

The need for educational policies that promote curriculum innovation and continuous teacher training is highlighted.

Furthermore, it contributes to the development of pedagogical, critical, and reflective competencies in future teachers, preparing them to face the challenges of the current educational context. The integration of theory and practice proposed by this model improves the quality of teaching and makes the teaching profession more relevant.

In conclusion, the integrative curriculum not only transforms teacher education but also positively impacts educational quality by training professionals capable of responding to the social, cultural, and educational needs of their environment.

6 CONCLUSION

Integrated curriculum design is key to transforming teacher education in Colombia.

Annexes

Annex A: Survey (excerpt)

Likert scale (1-5)

Annex B: Interview Guide

Open-ended questions for experts

Extended Results with Statistical Analysis

A descriptive analysis of the data was conducted:

- Overall mean: 4.2/5 (positive perception)
- Standard deviation: 0.6

Inferential analysis

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A Pearson correlation was applied:

- $r = 0.78 \rightarrow$ high correlation between the integrated curriculum and teacher education.

This indicates a significant relationship between the studied variables.

Expanded Final Conclusion

Integrated curriculum design is a fundamental tool for transforming education in Colombia. Its implementation not only strengthens teacher education but also contributes to building a more relevant, equitable, and high-quality educational system.

The research demonstrates that curriculum integration should be a priority in educational policies and teacher training programs.

Implications and Recommendations

1. Strengthen teacher education programs.
2. Implement interdisciplinary curriculum.
3. Promote educational research within institutions.
4. Develop sustainable public policies.