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Articles scientists

Revisión de la literatura sobre los principales modelos pedagógicos utilizados en la educación básica

Review of the literature on the main pedagogical models used in basic education

Revisão da literatura sobre os principais modelos pedagógicos utilizados na educação básica

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Resumen

En la literatura se han abordado diferentes investigaciones relacionadas con el aprendizaje a nivel de educación básica. Esto ha originado diversas maneras de ver la educación, lo que ha propiciado la adopción de diferentes modelos pedagógicos que, de acuerdo con la naturaleza de cada modelo, tienen enfoques particulares acerca de cuál es la mejor forma de enseñar y aprender. En este artículo se presenta una revisión de la literatura de los principales modelos empleados, los cuales son un referente obligado para cualquier docente. Asimismo, se considera fundamental saber que un modelo pedagógico puede entenderse como el marco teórico del cual se desprenderán los lineamientos y estrategias para organizar los fines educativos para secuenciar y jerarquizar los contenidos. Cada modelo, además, resulta relevante debido a que a través de él es posible establecer las relaciones entre el alumnado, los saberes y la práctica docente y, en conjunto, determinan la forma en que se concibe la evaluación. Como base de esta investigación y para conocer los distintos modelos pedagógicos aplicados en estas investigaciones, se presentan los diferentes puntos de vista acerca de cómo se da el aprendizaje y cómo se enriquece el conocimiento del docente, y cómo se amplía su capacidad para apreciar, desde distintos enfoques los fenómenos que suceden en el proceso educativo. Los hallazgos revelan la prevalencia de modelos tradicionales y conductistas, junto con una transición hacia enfoques constructivistas, culminando en la propuesta del Modelo Orquestado de Ajuste Pedagógico (MOAP) como marco integrador.

Palabras clave: aprendizaje, educación, modelos de aprendizaje, revisión bibliográfica.

Abstract

The literature has addressed different research related to learning at the basic education level. This has given rise to diverse ways of looking at education, which has led to the adoption of different pedagogical models that, according to their nature, have particular perspectives on the best way to teach and learn. This article presents a review of the literature on the main models employed, which serve as those which constitute essential references for teachers. It is essential to recognize that a pedagogical model is the theoretical framework from which guidelines and strategies for organizing educational objectives—in order to sequence and prioritize content—are derived. Each model is also relevant because it allows relationships to be established between students, knowledge, and the teacher's actions, which together

determine how evaluation is conceived. As a basis for this research, and to understand the different pedagogical models applied in these studies, the different points of view on how learning takes place are presented, along with how teachers' knowledge is enriched and how their capacity to appreciate the phenomena occurring in the educational process from different perspectives is strengthened. The findings reveal the prevalence of traditional and behaviorist models, alongside a transition toward constructivist approaches, culminating in the proposal of the Orchestrated Model of Pedagogical Adjustment (OMPA) as an integrative framework.

Keywords: education, literature review, learning, pedagogical models.

Resumo

A literatura aborda diversos estudos relacionados à aprendizagem no ensino fundamental. Isso levou a diferentes perspectivas sobre a educação, resultando na adoção de diferentes modelos pedagógicos. Cada modelo, de acordo com sua natureza, possui uma abordagem particular sobre a melhor maneira de ensinar e aprender. Este artigo apresenta uma revisão da literatura sobre os principais modelos utilizados, que são referências essenciais para qualquer professor. É crucial também compreender que um modelo pedagógico pode ser visto como o arcabouço teórico a partir do qual são derivadas diretrizes e estratégias para organizar objetivos educacionais, sequenciamento e priorização de conteúdos. Além disso, cada modelo é relevante porque estabelece as relações entre alunos, conhecimento e prática docente, e juntos determinam como a avaliação é concebida. Como fundamento desta pesquisa, e para compreender os diversos modelos pedagógicos aplicados nesses estudos, são apresentadas diferentes perspectivas sobre como a aprendizagem ocorre, como o conhecimento dos professores é enriquecido e como sua capacidade de apreciar os fenômenos que ocorrem no processo educativo a partir de diferentes perspectivas é aprimorada. Os resultados revelam a prevalência de modelos tradicionais e behavioristas, juntamente com uma transição para abordagens construtivistas, culminando na proposta do Modelo Orquestrado de Ajuste Pedagógico (MOAP) como uma estrutura integrativa.

Palavras-chave: aprendizagem, educação, modelos de aprendizagem, revisão de literatura.

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Introduction

Teaching is a complex process characterized by the presence of multiple variables involving different teaching and learning methods and processes (Flórez Ochoa, 1994). This process has evolved, and throughout history, different educational models have been developed (Flórez Ochoa, 1994; De Zubiría Samper, 2006).

The educational model can be defined as a set of established norms that guide the teaching process (Joyce et al., 2015). By relating different pedagogical and educational approaches, it becomes a cross-cutting axis of education; hence, numerous research projects have been developed with the aim of addressing problems at the international, national, and regional levels, and thus leading to the development of study programs (Pansza et al., 1996; Taba, 1974). Its purpose, among others, is to guide teachers in their teaching work.

Establishing an educational model promotes equity by ensuring homogeneous treatment within the same educational context (Braslavsky, 1999). Without such a model, each teacher would teach differently, hindering effective control over the content taught and making it difficult to establish benchmarks for assessment. Furthermore, it would be much harder for a student to adapt to a change of school, as validating their prior studies would be complex.

This article presents a qualitative bibliographic research study based on grounded theory, with the aim of identifying the main educational models addressed in the scientific literature. The works considered were those from the CONACYT journal index in Mexico, journals indexed in Scopus, and journals from the Journal Citation Reports (JCR) from the Clarivate Analytics.

Methods and materials

The methodological design of this research is based on Grounded Theory, whose central purpose is the generation of theory from the systematic analysis of empirical data. In this sense, it allows for the explanation of a social phenomenon within its natural context. This methodology, developed by Glaser and Strauss (1967), relies on the inductive method; it also prioritizes the emergence of concepts directly from the analyzed data, avoiding, as far as possible, the imposition of a priori theoretical frameworks.

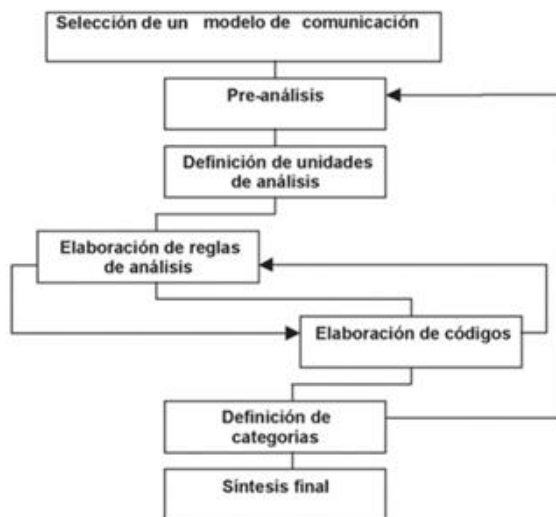
Research design

A qualitative research approach was used, focused on the documentary analysis of scientific literature. The unit of analysis consisted of scientific articles published in journals indexed in the Journal Citation Reports (JCR), Scopus, and the CONACYT journal index of Mexico, due to their academic recognition and editorial quality.

To operationalize the analysis process, the procedural model proposed by Mayring (2000) was adopted, which offers a systematic structure for qualitative content analysis. Although Mayring is not part of the original theoretical framework of Grounded Theory, both approaches are compatible as far as they share the principle of deriving categories directly from the data. In this study, Mayring's model was used as procedural support, that is, as an operational guide for the coding and categorization stages, without replacing the theoretical-inductive approach that guides the research. This procedure is illustrated in Figure 1.

Figure 1. General procedure of the qualitative content analysis technique.

Based on the Mayring model, (2000).



Theoretical sampling and selection criteria

The sampling used was theoretical, in accordance with the principles of Grounded Theory, in which the selection of cases does not respond to statistical criteria, but to the need to obtain relevant information for the progressive development of the theory.

The inclusion criteria for the articles were as follows:

1. Full-text research articles available.
2. Publications that explicitly apply a model, or theoretical approach, to the analysis or solution of a problem.
3. Articles published in journals indexed in JCR, Scopus or in the CONACYT journal index of Mexico.
4. Studies related to the object of interest of the research.

The exclusion criteria were:

1. Editorial documents, reviews, technical notes, or theoretical essays without empirical application.
2. Articles that did not explicitly describe a methodological process.
3. Duplicate publications across databases.

The selection of articles was carried out progressively. The analysis began with an initial set of documents, and as the coding and constant comparison process progressed, new articles were incorporated to refine, contrast, or expand the emerging categories.

Information collection and processing

Since the research is documentary in nature, data collection instruments typical of empirical studies, such as surveys or interviews, were not used. Instead, a systematic and verifiable procedure was established for locating, selecting, organizing, and analyzing the information.

Data collection was carried out through an intentional search of scientific articles between 2000 and 2023, in Spanish and English, with terms such as 'pedagogical models' AND 'basic education', using boolean operators in titles and abstracts and using keywords related to the object of study, in the Journal Citation Reports (JCR), Scopus, and the CONACYT journal index of Mexico. The selected articles were downloaded in full text and organized in a digital repository for later analysis.

The information processing was conducted following the principles of Grounded Theory, using an inductive qualitative analysis. Each document underwent a thorough reading, from which relevant fragments were identified and progressively coded. This process was supported by the use of Taguette software, which allowed for the storage of documents, the assignment of codes, the grouping of categories, and the facilitation of ongoing comparison between texts.

The information was analyzed in phases of open, axial, and selective coding, allowing the emergence of categories, properties, and conceptual relationships from the data analysis. The process continued until theoretical saturation was reached, at which point the analysis of new documents did not yield any new conceptual information.

In this way, although traditional collection instruments were not used, the information was collected and processed through a rigorous procedure with the qualitative and documentary approach of the research.

Theoretical saturation

Theoretical saturation was reached when the analysis of new articles ceased to contribute novel properties, dimensions, or conceptual relationships to the established categories. From this point onward, the incorporation of more documents did not generate new codes or modify the emerging theoretical structure, indicating that the phenomenon had been universally understood based on the analyzed data. The process culminated in a total of 300 articles, a number that confirmed both conceptual redundancy and the stability of the categories.

Analytical procedure

The data analysis was developed systematically following the classic procedures of Grounded Theory:

1. Open coding: A thorough reading of the articles was conducted, identifying relevant concepts and assigning initial codes directly to text fragments. This phase allowed for the disaggregation of the data and the generation of a comprehensive list of descriptive codes.
2. Axial coding: The codes obtained were grouped and related to each other, identifying categories and subcategories, as well as their properties and dimensions. In this stage, the relationships between conditions, actions/interactions, and consequences were systematically explored.
3. Selective coding: The categories were integrated around central concepts, which allowed the articulation of a coherent theoretical structure capable of explaining the phenomenon studied.

Throughout the process, constant comparison was applied, in which each new text fragment was compared with previously coded fragments, allowing for adjustment, merging, or redefinition of emerging categories. See Figure 2.

Figure 2. Process for applying the grounded theory proposed by Glaser and Strauss (1967).

Own elaboration based on Strauss and Corbin (2002).



Use of support software

To ensure traceability and systematization of the analysis, the Taguette software, an open-source tool specializing in qualitative analysis, version 1.4.1, was used. This software allowed:

1. Storing and organizing the analyzed documents.
2. Assigning codes to the text segments.
3. Visualizing the categories using hierarchical tree-like structures.
4. Facilitating the constant comparison between texts and codes.

The use of Taguette did not replace the researcher's interpretive analysis but rather served as an instrumental support to ensure the coherence and verifiability of the analytical process.

Methodological rigor

The scientific rigor of the research was ensured through constant comparison and peer review of codes:

capacity by addressing the phenomena that occur in the educational process from diverse approaches. Table 1 presents the main findings.

Table 1. Main educational models found in the research. Source: Author's own elaboration.

Model type	Characteristics	Documents found
Traditional pedagogical model	The main role in this model falls to the teacher, who is seen as a transmitter of knowledge; the student, for their part, has a passive role, receiving the content.	69 documents
Behaviorist pedagogical model	In this model, the transmission and accumulation of knowledge play a primary role; the teaching methodology tends to be mainly expository-demonstrative, so the teacher is at the center of the process and the student's role remains passive.	67 documents
Experiential-romantic pedagogical model	This model focuses on humanism, since it conceives of children's development as a natural and spontaneous process, so the content and topics to be studied do not have a pre-established sequence, but rather start from the freedom, interests, and needs of the students.	46 documents
Cognitivist-developmental pedagogical model	Unlike previous models, it does not seek the accumulation of knowledge, but to contribute to intellectual development (progressive and sequential) through the mediation of the teacher.	65 documents

Constructivist pedagogical model	Based on the ideas of authors such as Piaget and Vygotsky, among others, it is one of the most widely accepted models today; the student is at the center of the process and becomes the protagonist of their own learning.	53 documents
Total number of documents analyzed		300 documents

The following relevant information was obtained from this table:

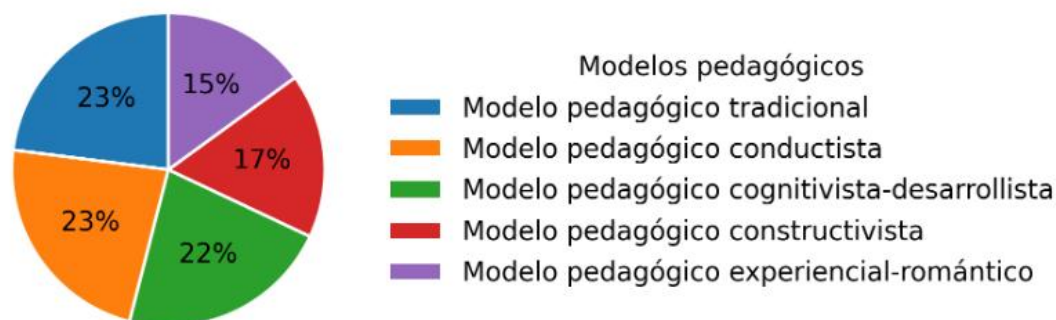
1. **Traditional Pedagogical Model:** The methodology employed is primarily verbalist (lecture-based). This consists of the teacher lecturing while the students listen. It is observed to be based on memorization, as it proposes that learning is achieved through the repetition of exercises, neglecting the meaning or practical application of what is learned. The learning environment is rigid and discipline-based; criticism is not permitted, and the teacher assumes the role of authority. Evaluation is summative, so assessment takes place at the end of the process, in which the student must demonstrate what they have learned, usually through an oral or written exam, in order to receive a grade and determine whether they passed or failed. (Gimeno Sacristán, 2000; Zavala, 2004).
2. **Behaviorist Pedagogical Model:** In the behaviorist model, learning can be understood as the acquisition of facts, skills, and concepts through training, repetition, exposure, and teacher-guided practice. It is also characterized by the use of reinforcement (rewards) to encourage performance. Learning is considered to occur when there is an observable change in behavior. Evaluation is primarily summative: although progress is recorded throughout the process, the emphasis is on the final product as the determining criterion for whether the student passes or fails. (Roque Hernández & Domínguez Mota, 2012; Puigdelívol, 2000).
3. **Experiential-Romantic Pedagogical Model:** In accordance with the premises of this model, some authors point out that traditional assessment is incompatible with it could limit the student's natural expression and spontaneous development. However, if assessment is necessary, a qualitative assessment is proposed, focused on monitoring the individual development of students rather than measuring standardized results (Ainscow, 2001; UNESCO, 1994).

4. Cognitive-developmental pedagogical model: The teaching methodology is varied and focuses on the learning process, with the aim of developing skills based on students' prior knowledge. The teacher's role is that of facilitator-mediator, while the student takes the lead. Assessment is both formative and summative, considering both the learning process and the final result (Alonso, Renzulli & Benito, 2003; Strauss & Corbin, 2002).
5. Constructivist Pedagogical Model: The teacher's role is that of a facilitator, identifying students' needs and promoting the development of critical, creative, and reflective thinking through tasks and questions that contribute to solving authentic problems. Students actively participate and propose solutions, thus acquiring increasing autonomy. Similarly, collaborative work, prior knowledge, and context are essential for constructing learning; therefore, the presentation of cases or problems in real and meaningful environments is prioritized. Assessment is primarily formative, linked to ongoing feedback that contributes to improving learning, as well as the teaching process itself (Vygotsky, 1978; Piaget, 1970; Ausubel, Novak & Hanesian, 1983).

Figure 4 shows the data obtained based on the number of works found.

Figure 4. Percentage graph for each model.

Porcentaje de trabajos analizados



Source: Prepared by the author using data obtained from Taguette.

Figure 4 shows the distribution of the pedagogical models identified in the reviewed literature, with the purpose of determining which is the most recurrent in the analyzed research. To this end, a questionnaire was administered to thirty researchers in the field of education, and the results are summarized in Table 2.

Table 2. Characteristics of the pedagogical models identified in research on basic education. Source: Author's own elaboration.

Categories of analysis	Traditional	Behaviorist	Experiential-romantic	Cognitivist-developmental	Constructivist
Concept of learning	Memorizing and receptive	Observable and measurable behavior	Natural and spontaneous development	Progressive and sequential intellectual development	Action-reflection in a sociocultural context
Type of objectives	Potential capabilities	Operational and measurable	Free, focused on the student's interest	Cognitivist-developmental	Molar or generic
Type of content	Encyclopedic	Micro-specific	Without a pre-established sequence, they start with the students' interests.	Structured and sequenced according to level of development	Meaningful and contextualized
Teaching and learning activities	Professor's Lectures	Demonstrative practices and repetitive exercises	Free activities based on experience and creativity	Teacher-mediated activities aimed at cognitive development	Group solutions, case studies, and authentic problems
Evaluative trend	Summative written exams	Behavioral measurement and objective tests	Qualitative; monitoring of individual development	Formative and summative; considers process and result	Qualitative and formative; based on ongoing feedback
Curriculum structure	By subject	Modular and sequential	Flexible; without a rigid structure	Sequential according to development stages	Flexible and integrated curriculum

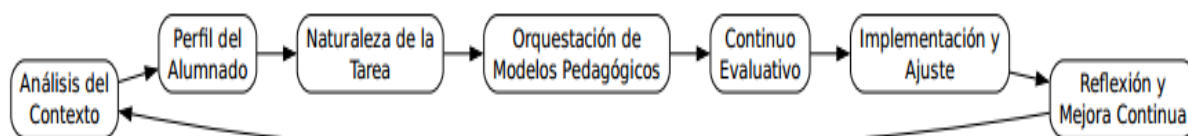
Emerging theory: Orchestrated Model of Pedagogical Adjustment (OMPA)

Based on a comparative analysis of traditional, behaviorist, experiential-romantic, cognitive-developmental, and constructivist pedagogical models, an emerging theory called the Orchestrated Model of Pedagogical Adjustment is proposed. This theory maintains that learning in basic education is optimized when teachers deliberately and sequentially articulate strategies from different pedagogical models, simultaneously considering the nature of the learning task, the students' profile and level, and the contextual conditions in which the educational process unfolds. This articulation is based on an evaluative continuum that integrates formative and summative assessment as complementary components of learning.

The analysis revealed that the nature of the learning task is a central element in pedagogical decision-making. Tasks vary according to the type of knowledge to be developed, the cognitive complexity involved, and the degree of contextualization or authenticity of the learning. According to the proposed theory, tasks that demand memorization, factual mastery, or initial accuracy benefit from structured strategies, while those aimed at deep understanding, transfer, and problem-solving require more open and contextualized approaches.

Likewise, the student's profile and status directly influence the selection of pedagogical strategies. The level of autonomy, motivation, prior knowledge, and specific educational needs determine the degree of teacher direction or active student participation. In contexts where low autonomy or high dependence on the teacher predominates, theory suggests starting with explicit instruction and guided practice strategies, gradually progressing toward approaches that foster self-regulation and the autonomous construction of learning. See Figure 5.

Figure 5. Processes proposed in the OMPA theory.



Source: Own elaboration.

The conditions of the educational context represent another fundamental component of the theoretical model. Factors such as available time, institutional resources, group size, school regulations, and classroom climate influence the actual possibilities for implementing certain strategies.

The Orchestrated Model of Pedagogical Adjustment recognizes these limitations and posits that the effectiveness of pedagogical intervention depends on the teacher's ability to adapt didactic approaches to these conditions without losing coherence with the learning objectives.

In this context, pedagogical strategies are not conceived as mutually exclusive, but as elements that can be integrated within the same educational process.

Practices associated with traditional and behaviorist models provide structure, clarity, and precision in the initial phases of learning. Cognitive-developmental perspectives facilitate the activation of prior knowledge, scaffolding, and metacognitive reflection. Finally, constructivist and experiential approaches promote the resolution of authentic problems, collaborative work, and the construction of relevant meanings, fostering transferable and lasting learning.

Within this theory, assessment is conceptualized as an integrated continuum that accompanies the entire teaching and learning process. Formative assessment serves a regulatory and guiding function, providing constant feedback that allows for adjustments to pedagogical strategies and supports student progress. Summative assessment, on the other hand, is used to evaluate the learning achieved at the end of a learning sequence, always aligned with previously established criteria and the evidence gathered throughout the process.

Thus, the emerging theory explains that the pedagogical models analyzed do not represent contradictory positions, but rather complementary approaches that acquire meaning when applied in a situated and reflective manner. The Orchestrated Model of Pedagogical Adjustment provides an integrative explanation of the educational phenomenon in basic education, highlighting the importance of teachers' decision-making based on an analysis of the context, the students, and the cognitive demands of the tasks, and offering a theoretical framework that can be evaluated and refined in future empirical research.

Discussion

The findings of this review show that, although traditional and behaviorist pedagogical models continue to have a significant prevalence in the analyzed literature, there is also a progressive shift towards student-centered approaches, such as the cognitivist-developmental and constructivist approaches, as well as towards emerging integrative proposals derived from this study. This coexistence of models reflects the complexity of the educational field, in which practices focused on the transmission of content coexist with approaches oriented towards the development of autonomy, critical reflection, and the active construction of learning.

In this sense, the results not only confirm the simultaneous validity of different pedagogical paradigms but also allow us to understand that their application is neither exclusive nor homogeneous, but rather situated and contextual. Based on the comparative analysis of the reviewed models, the Orchestrated Model of Pedagogical Adjustment is proposed, which posits that teaching practice in basic education is characterized by the deliberate articulation of strategies from different pedagogical approaches, adjusted to the nature of the task, the student profile, and the conditions of the educational context.

This theoretical proposal provides an integrative explanation of why traditional and behaviorist practices persist, while more active and participatory approaches are incorporated, without this necessarily implying a contradiction between models.

When comparing these results with previous studies, relevant points of convergence emerge. Coll and Martín (2006) highlight the consolidation of constructivism as the dominant framework in contemporary pedagogical discourse, while Puigdellívol (2000) warns of the persistence of rote learning practices associated with traditional models in school contexts. Similarly, Roque Hernández and Domínguez Mota (2012) document the continued relevance of behaviorist approaches in teacher training, which aligns with the findings of this research. However, the distinctive contribution of the present study lies in interpreting this coexistence as a form of conscious pedagogical adjustment, rather than simply as resistance to methodological change. In this sense, the Orchestrated Model of Pedagogical Adjustment not only recognizes the plurality of approaches documented by these authors, but also reinterprets it as a deliberate teaching competence: the ability to select, combine and adapt pedagogical strategies according to the context, thus transcending the logic of exclusionary models towards a flexible and intentional teaching practice.

The main difference from previous studies lies in the methodological approach employed. The use of Grounded Theory, supported by qualitative analysis tools such as Taguette, allowed for the systematic processing of information, the application of constant comparison, and the identification of the point of theoretical saturation. This procedure fostered the emergence of a theoretical proposal based directly on the data, enabling progress toward an explanatory framework regarding how pedagogical models are articulated in educational practice, complementing the contributions of existing descriptive reviews in the literature.

However, it is necessary to acknowledge the study's limitations. First, the analysis focused exclusively on articles indexed in the CONACYT Mexico Journal Index, Scopus, and JCR databases, which excluded gray literature and local educational experiences that could enrich the understanding of the phenomenon. Second, the survey of thirty researchers in the field of education, used as a complementary validation strategy, offers insights into trends in the selection and application of pedagogical models, as well as teachers' perceptions of their contextual relevance; however, given its scale, it does not allow for the generalization of the results to broader populations. Finally, while the qualitative approach adopted provides interpretive depth, it does not allow for the establishment of statistical relationships between the application of pedagogical models and learning outcomes. Therefore, it is recommended that these findings be complemented with quantitative or mixed-methods studies in future research.

Taken together, the results show that educational research is at a point of transition, marked by the tension between the persistence of traditional models and the consolidation of student-centered approaches. This tension, far from representing a weakness, constitutes a favorable condition for the development of integrative proposals such as the Orchestrated Model of Pedagogical Adjustment, which allows us to understand teaching practice as a dynamic, contextualized, and reflective process. Based on these findings, the need to continue investigating how pedagogical models are articulated in real teaching contexts and how this articulation influences the quality and equity of learning in basic education is evident.

Conclusions

The results of this literature review show that the most frequently used pedagogical models in educational research are the traditional behaviorist, and cognitivist-developmental models, along with a notable presence of the constructivist model, identified in 53 of the 300 documents analyzed. This diversity of approaches confirms that teaching in basic education is undergoing a transition, in which practices focused on the transmission of knowledge coexist with proposals aimed at promoting autonomy, critical reflection, and the active construction of learning. Far from indicating a methodological contradiction, this coexistence highlights the complexity of the educational field and the need to understand teaching practice as a contextualized and dynamic process.

From this perspective, the findings not only align with previous research documenting the continued relevance of traditional and behaviorist models but also support the progressive consolidation of student-centered approaches. Based on the analysis conducted, the Orchestrated Model of Pedagogical Adjustment is proposed, which allows for an integrative interpretation of these results: pedagogical models do not operate as rigid or exclusive frameworks, but rather as points of reference that teachers deliberately and contextually articulate according to the nature of the tasks and learning, the student profile, and the conditions of the educational context. This theoretical proposal provides an explanatory framework that seeks to transcend the dichotomy between “traditional” and “innovative” models, by recognizing the functional value of each approach within a situated pedagogical sequence.

Furthermore, the use of Taguette as a tool for managing and organizing qualitative data represented added methodological value, facilitating the systematic processing of information and the constant comparison of categories. It should be noted that the identification of theoretical saturation was the result of an analytical decision by the researcher, not an automated function of the software. This procedure strengthened the credibility and traceability of the study, favoring the emergence of the theoretical proposal from recurring patterns identified in the data. This was complemented by contributions from descriptive reviews in the available literature.

However, it is important to acknowledge the study's limitations. The review was limited to articles indexed in international and national databases, which excluded gray literature and local educational experiences that could broaden our understanding of the phenomenon. Even so, the results obtained are relevant from a theoretical and

methodological standpoint, as they identify general trends in educational research and support the development of the theoretical framework presented.

In this sense, pedagogical models should be understood as guiding frameworks that can be adapted to the diversity of contexts and educational needs. The Orchestrated Model of Pedagogical Adjustment emphasizes the importance of reflective teaching practice, capable of integrating different pedagogical approaches based on clear and context-specific criteria, rather than an uncritical adherence to a single paradigm. This implies the need for ongoing teacher training and professional development, as well as the development of students capable of adapting to increasingly complex educational scenarios.

Finally, this work opens new lines of research aimed at deepening the empirical validation of the proposed model, particularly in three dimensions: the analysis of its impact on teaching and learning processes, the integration of educational technology as a pedagogical mediator, and the study of how teachers appropriate and articulate the different models in their daily practice. In this way, the research contributes both to the understanding of pedagogical models in basic education and to the construction of a theoretical framework geared towards the development of more inclusive, flexible, and relevant educational practices in the face of the challenges of contemporary education.

Future lines of research

Based on the findings and limitations noted, several paths can be identified that may lead to further research:

- Technology and pedagogical models: delving into how ICT, virtual environments and artificial intelligence are transforming the application of pedagogical models, modifying the roles of teachers and students.
- Empirical comparison of results: conduct studies that measure the impact of each model on the development of specific skills, combining qualitative and quantitative methodologies.
- Emerging models: exploring approaches such as project-based learning, hybrid learning, or universal design for learning (UDL), which were not the central focus of this review but are gaining relevance.
- Adaptation to different educational levels: analyzing how the models are implemented in basic, upper secondary and higher education, considering the curricular and sociocultural particularities of each level.

- Teacher training: investigating how teachers understand, adopt, and adapt pedagogical models in their daily practice, as well as the factors that facilitate or hinder their appropriation.

These lines not only complement what has already been done but also constitute a concrete opportunity to generate more innovative and contextualized proposals that respond to the current challenges of education.

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