CONTINUING TEACHER EDUCATION: PEDAGOGICAL PRACTICES, POLICIES, AND CURRICULUM

FORMAÇÃO CONTINUADA DOCENTE: PRÁTICAS PEDAGÓGICAS, POLÍTICAS E CURRÍCULO

FORMACIÓN CONTINUADA DOCENTE: PRÁCTICAS PEDAGÓGICAS, POLÍTICAS Y CURRÍCULO

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ABSTRACT: This research aims to analyze the configuration of scientific productions on the continuing education of elementary school teachers in the database of the Brazilian Digital Library of Theses and Dissertations (BDTD) for the period from 2017 to 2021. Regarding the nature of the data, this is a qualitative investigation, referred to as the state of knowledge, based on a survey of studies that allowed for breaking pre-established conceptions and epistemologies in the field of knowledge. The findings enabled an understanding of the inseparable processes between theory and practice for reflecting on the teaching practice, supported by a curriculum that respects diversity and redefines pedagogical praxis. Furthermore, the current public policies for teacher education are based on market-oriented principles and follow a technicist model of education with an emphasis on instrumentalization.


RESUMO: Esta pesquisa tem como objetivo analisar a configuração das produções científicas sobre formação continuada de professores do ensino fundamental na base de dados da Biblioteca Digital Brasileira de Teses e Dissertações (BDTD), no recorte temporal de 2017 a 2021. Quanto à natureza de dados, trata-se de uma investigação qualitativa, denominada estado do conhecimento, a partir de um levantamento de estudos que permitiu romper com concepções pré-estabelecidas e epistemologias no campo do conhecimento. Os achados possibilitaram compreender os processos da indissociabilidade entre teoria e prática para a reflexão do exercício da docência, sustentados em um currículo que respeita à diversidade e ressignifica a práxis pedagógica. Além disso, as políticas públicas de formação de professores vigentes apoiam-se em fundamentos mercadológicos e pautam-se no modelo tecnicista de educação com ênfase na instrumentalização.


RESUMEN: Esta investigación tiene como objetivo analizar la configuración de las producciones científicas sobre la formación continua de profesores de educación primaria en la base de datos de la Biblioteca Digital Brasileña de Tesis y Disertaciones (BDTD), en el período de 2017 a 2021. En cuanto a la naturaleza de los datos, se trata de una investigación cualitativa, denominada estado del conocimiento, a partir de un levantamiento de estudios que permitió romper con concepciones y epistemologías preestablecidas en el campo del conocimiento. Los hallazgos permitieron comprender los procesos de la indisolubilidad entre teoría y práctica para la reflexión sobre el ejercicio de la docencia, sustentados en un currículo que respeta a la diversidad y resignifica la práxis pedagógica. Además, las políticas públicas de formación de profesores vigentes se apoyan en fundamentos de mercado y se basan en el modelo tecnicista de educación con énfasis en la instrumentalización.

Introduction

Continuing training is part of the professional trajectory of teachers, as it allows the construction of knowledge and skills relevant to the pedagogical practices developed in learning spaces. This possibility of re-signifying practices corroborates the overcoming of difficulties and limits found in the school environment. The training process must consider the interrelationships between praxis and the teaching curriculum as a focus of reflection.

Throughout the academic and professional career, teachers give new meaning to praxis through continued training and (re)construct experiential, knowledge and pedagogical knowledge. Experiential knowledge emerges throughout the teacher's process through the experiences and reflection of teaching; knowledge comprises the specific contents of each area; Pedagogical knowledge refers to teaching and learning processes (Pimenta, 1999).

Considering these theoretical-conceptual premises, we highlight the following research problem: what is the configuration of the continuing education of elementary school teachers in scientific productions in the Brazilian Digital Library of Theses and Dissertations (BDTD)?

From the perspective that continuing education represents a possibility for studies and research with relevant themes in the scientific context, this investigation aims to analyze the configuration of scientific productions on continuing education of elementary school teachers in the BDTD database, in the time frame from 2017 to 2021.

This study is justified by the importance of continued training for primary education teachers, specifically in the elementary school stage, as it enables the redefinition of pedagogical practices, as well as reflecting on knowledge, doing, and being a teacher. These arguments contribute not only to the quality of teaching, but also to the professional development of teachers and the transformation of social relations with actions in the community in which the school is located.

Methodologically, this investigation takes a qualitative approach based on different subjectivities to understand the differences and similarities. It is also a survey called the state of knowledge that allows “[...] identification, records, categorization that lead to reflection and synthesis on the scientific production of an area or space of time, incorporating periodicals, theses, dissertations, and books on a specific topic” (Morosini; Kohls-Santos; Bittencourt, 2021, p. 23, our translation). Furthermore, this type of research allows the reader to access specific information from a given database.

This text is organized into three sections: introduction, in which we present the object of study, problem, and objective of the research; methodology with corpus analysis procedures;
data analysis, in which we discuss the dimensions that emerged in the floating readings of the prospected productions, based on the objectives and results presented.

**Research methodological track**

In this section, we present the methodological procedures for mapping scientific productions about the “continuing training of elementary school teachers.” We adopted the perspective of the state of knowledge with the elaboration of the string, searching in the BDTD database, in the time frame between the years 2017 and 2021, the delimitation in the area of Education, systematization, selection, and analysis of the collected data. This choice of the object of study was the importance of the continued training of teachers and the reframing of praxis for reflection on teaching.

State of knowledge is a survey of productions in databases on a specific topic that allows researchers to identify, evaluate, and interpret studies related to their research object. Works published in the academic field are a source of study as they enable reflection, analysis, updating, and breadth of discussions in the academic field through reading the theoretical framework and methodology, in addition to stimulating the learning of writing and the development of science.

Mapping a specific theme on a platform, such as BDTD, the Coordination for the Improvement of Higher Education Personnel (Capes), Scientific Electronic Library Online (ScieELO), is a particularity of the survey called “state of knowledge” that provides the researcher with “[...] understand how knowledge is produced in doctoral theses, master’s dissertations, journal articles and publications” (Romanowski; Ens, 2006, p. 39, our translation).

The process of constructing the mapping and selecting publications requires steps, namely: 1) selection of the research question, as well as definition of the research topic and objectives; 2) selection of publications, based on research in an electronic database and definition of inclusion and exclusion criteria to define the sample; 3) data collection based on the representation of the studies.

In the first stage, we raised the following questions: what is the geographic distribution of scientific productions regarding the object of this study in the time frame of the last five years? What types of research are carried out? What are the meanings and meanings of
continuing education for elementary school teachers? Next, we defined the methodological path for analyzing the publications (see Figure 1).

**Figure 1 – Knowledge state construction process**

![Diagram showing the knowledge state construction process](image)

Source: Prepared by the authors (2023).

Regarding the nature of the data, this research is qualitative as it enables the understanding of the relationships of social phenomena and interpretations of data from the plural perspective of researchers with scientific rigor (Gerhardt; Silveira, 2009). This type of study does not express any value or judgment about its object, but seeks to understand the facts presented and their interrelationships throughout the investigation.

BDTD was chosen due to its relevance, as it contains a collection of data with partnerships with Brazilian institutions and research indexed on the platform itself. The Brazilian Institute of Information in Science and Technology (IBICT) is responsible for maintaining the platform, a system that brings together Brazilian theses and dissertations from research from stricto sensu postgraduate programs. This database has partnerships with 133 institutions, totaling 569,576 dissertations and 207,396 theses.

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6 Data was made available on the BDTD website in January 2023.
The time frame was delimited by the relevance of productions carried out in the last five years, since the cut between the years 2017 and 2021 frames is the most recent work that can highlight the development of research in the field investigated. For data collection, the string (“formação continuada”, “formação de professores”, “ensino fundamental” AND “formação docente”), was used, with the help of Booleans, which make it possible to carry out logical operations using the following operators: AND (AND), OR (OR) and NOT (NO), thus, combined with keywords in the search for articles, dissertations and theses in electronic databases (Saks, 2005). In the search, we found nine works; we excluded two as they did not meet the inclusion criteria (see Figure 2).

Figure 2 – Search result for article selection

Source: Prepared by the authors (2023).

In the second stage, we began skimming the abstracts and keywords according to the inclusion and exclusion criteria, and the mapped studies were systematized. Soon after, we recorded the methodology, geographic distribution and dimensions focused on continuing education presented in section 3. In organizing the data and information, the keywords “Education” and “Training” were the most used by the authors in the three theses, and six dissertations, followed by “Teacher”.

Regarding the methodological paths and procedures of the productions, the analysis revealed that the nine works adopted a qualitative approach. Regarding the instruments, we

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7 “continuing education”, “teacher training”, “primary education,” AND “teacher training”.
8 The image explains how many theses were not selected, how many were included, and how many were found.
identified semi-structured interviews with greater incidence; in addition to these, observation, semi-structured, and online questionnaires were used (see Figure 3).

**Figure 3** – Mapping methodological trail

![Mapping methodological trail](image)

Source: Prepared by the authors (2023).

In Maciel's dissertation (2017) and Manga's thesis (2017), the types of procedures highlighted were case study, bibliographic, and documentary. When mapping the geographic dimension, we noticed that the studies cover all regions of Brazil. The South region with the highest number of dissertations: two in Chapecó (SC), one in Cascavel (PR), and one in Rio Grande do Sul, followed by the Northeast region: one thesis and one dissertation in the state of Paraíba. The North, Southeast, and Center-West regions had the lowest production rates: one dissertation in Pará, one thesis in Espírito Santo, and one thesis in Mato Grosso.

In this study, the Federal University of Fronteira Sul in Chapecó and the Federal University of Paraíba in João Pessoa obtained the highest number of productions in the Postgraduate Program in Education in master's and doctoral courses. Finally, after successive readings, we carried out a detailed analysis of the publications based on content evaluation, categorizing them into dimensions presented below.
Continuing training: theoretical reflections

Continuing training encompasses training processes in which teachers participate after initial training and which contribute to improving their educational practices (Gatti et al., 2019) and their professional development. This conception focuses on actions (processes), subjects (teachers), and purposes (teaching practices and professional development).

Regarding the space for the development of this training, Imbernón (2010) highlights the school as the center. It is from this place that the demands for the proposal of continued training for teaching must emerge. However, the majority of continuing education courses offered to teachers do not consider the specific demands of each teaching context. There are training proposals from state and municipal education networks that aim to increase external assessment indicators at the national level, for example, the Basic Education Development Index (IDEB), which, consequently, are restricted to training programs - a model in-service training criticized by several scholars on this topic (Imbernón, 2010; Gatti et al., 2019; Moreira, 2021).

Other factors that also raise the need for continued training for teachers are curricular demands, the implementation of educational programs and policies. These two factors, when interfering in pedagogical practices, require educators to reconstruct theoretical and practical knowledge, as well as the development of new knowledge related to these two fields.

In opposition to the training-by-training model, which is technical in nature, there is the defense of a training proposal from a practical-reflective perspective. This, unlike the former, focuses on practice as a starting point, development, and construction of knowledge; the teacher, in turn, assumes the position of a reflective and critical professional, capable of reflecting on pedagogical practices, aiming to transform them. This other look at continuing education is therefore based on the idea of reflection-action-reflection (Pérez Gómez, 1998).

In light of these discussions, the present study seeks to understand which dimensions of continuing education aimed at elementary school teachers are being discussed within the scope of scientific research in the BDTD database. To this end, in the following subsection, we present some reflections on the objectives and results of the scientific productions that make up the corpus of analysis of this study.
Pedagogical practices, policies, and curriculum

In the analysis of the scientific productions that make up the corpus of this study, three dimensions emerged: pedagogical practices, policies and curriculum, with 44.5% of the studies addressing practices, 33.3% dealing with policies and training programs, in a smaller percentage, 22.2% discuss issues related to the curriculum. The distribution of research under analysis across dimensions can be seen in figure 4.

**Figure 4 – Practices, programs/policies, and curriculum**

Práticas pedagógicas

Dimensões da formação continuada

Programas/Políticas

Curriculo

Andrade (2017)
Camerin (2017)
Cararo (2017)
Evangelista (2017)

Maciel (2017)
Fragoso (2020)
Souza (2017)

Manga (2017)
Figueiredo (2017)

Source: Prepared by the authors (2023).

In the pedagogical practices dimension, Camerini (2017) investigated how teachers' continuing education processes in the early elementary school years are developed. Cararo (2017) analyzed the meanings constructed by beginning teachers in teaching based on continued training in Mathematics modeling. Andrade (2017) discussed the use of games as mediation instruments for Mathematics teaching. Evangelista (2017) presented an understanding of the meanings constructed by beginning Portuguese and Spanish language teachers concerning professional development. Table 1 provides a summary of the reflections presented in the results of these investigative paths.
Table 1 – Pedagogical practices

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Reflections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practices</td>
<td>The relevance of the interrelationship between theory and practice in continuing training for teaching efficiency and quality (CAMERINI, 2017).</td>
</tr>
<tr>
<td></td>
<td>The contributions of continued training in Mathematical modeling to more dynamic and meaningful teaching (CARARO, 2017).</td>
</tr>
<tr>
<td></td>
<td>There is a need for teacher training to use games as a mediation tool in mathematics teaching (ANDRADE, 2017).</td>
</tr>
<tr>
<td></td>
<td>Understanding the interfaces between professional development and the knowledge and practice of beginning teachers (EVANGELISTA, 2017).</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023).

These results contribute to understanding the importance of continued training in relation to the different problems of pedagogical practices. Camerini's research (2017), when analyzing continuing education processes in the initial years of basic education, highlighted the inseparability between theory and practice as fundamental for teaching to reach the levels of quality and efficiency desired in schools. In turn, Cararo (2017) concluded that continued training in mathematical modeling contributes significantly to enhancing learning in this discipline.

Andrade (2017) highlighted the relevance of continued training so that teachers can use cultural artifacts as mediation instruments in their teaching practice. Thus, as other studies have already demonstrated, in addition to discussing the potential of games in educational practices, this research defended the relevance of these devices to mediate such practices. Evangelista's (2017) study investigated narratives from language teachers to demonstrate how they construct the meanings inherent to their professional development process, leading us to reflect on the interfaces between self-education and the process of being and becoming a teacher in school contexts.

As for scientific productions, the process of reflection on the effects of continued training on teaching practices comes close to the idea that the starting point for improving teaching is teaching. It is also worth highlighting that this close relationship between theory and practice implies considering that

[the] Continuing training should support, create, and enhance a real reflection by subjects on their teaching practice in educational institutions and other institutions, in a way that allows them to examine their implicit theories, their operating schemes, their attitudes, etc., establishing firmly a constant process of self-evaluation and what is done and why (Imbernón, 2010, p. 47, our translation).
The development of this training context, in which the teacher and his practices are central, with the teacher being an active subject and practicing his point of action and reflection, shifts teacher training from a technical perspective to a reflective dimension. Consequently, the set of scientific productions included in this dimension contributes significantly to the improvement of teaching practices.

In the programs/policies dimension, Maciel (2017) analyzed how the continued training offered by the National Pact for Literacy at the Right Age (PNAIC) contributes to the reorganization of Mathematics teachers' practices. Fragoso (2020) carried out a study on the repercussions of policies developed by the PNAIC for the articulation of continuing training proposals for teachers. Souza (2017) researched from which perspective teacher training has been taking place for the implementation of information and communication technologies (ICT) in the school space for the development of significant actions in school spaces. Figure 5 shows the main reflections proposed in the findings of these scientific productions.

**Figure 5 – Training programs and policies**

![Figure 5](source: Prepared by the authors (2023)).

Maciel (2017) argues, in the results of his research, that there is a relationship between the continuing education developed at PNAIC and the reorganization of teaching practices related to the teaching of Mathematics in the literacy cycle. For Fragoso (2020), both the PNAIC's continued training and that of municipal programs are unable to cover the specificities of children's learning, as they focus on preparatory education for the next phases of primary education. Souza (2017) states that the relevance of continuing education policies for the effective insertion of new technologies into pedagogical practices.

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9 Maciel (2017): The importance of the PNAIC for the reorganization of mathematics teaching in the literacy cycle; Fragoso (2020): The insufficiency of continuing training programs (PNAIC and PROMILA) to guarantee quality training, focused on specificities and non-preparatory and non-traditional education; Souza (2017): The relevance of continuing education policies for the effective insertion of new technologies into pedagogical practices.
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education, without detaching themselves from the traditional pedagogical model. Research by Souza (2017) points out that there is a need for continued training to work with ICT beyond the perspective of insertion in the school context, believing it to be crucial for the development of policies that guarantee such in-service training.

The research by Maciel (2017) and Souza (2017) is in line with the predictability that surrounds the proposition of teacher training programs and policies in the training process, with a view to the professional development of teachers and improving the quality of education. However, these programs and policies, in their conception and elaboration, receive influences and carry values and interests from different agents and public and private sectors, which interfere at the time of implementation (Gatti et al., 2019). Such programs and policies are necessary within the scope of continuing training for the quality of teaching work.

Furthermore, the context of this teaching work is affected by several factors which, therefore, also imply the implementation of continuing education programs and policies. In short, “[...] between the policy proposition and discourse, written or spoken, and its achievement in practices, there are injunctions from multiple factors, and the linearity between intentions and practices is hardly maintained” (Gatti et al., 2019, p. 48, our translation). This fact is confirmed in the results presented by Fragoso (2020), who observed the ineffectiveness of training proposals based on the PNAIC to promote the quality of teaching and focus on specificities in the school space.

Gatti et al. (2019) also argue that, during Brazilian democratic governments, advances were made in teacher training policies. However, the misalignment between the propositions of these policies and their implementation, as well as constant reformulations, prevent them from achieving the projected qualitative effects. The problem with educator training policies intensified with the implementation of the latest curricular guidelines, the BNC-Initial and Continuing Training, which has received numerous criticisms from scholars in the field of education.

Tiroli and Jesus (2022) warn that these guidelines, instead of valuing theoretical-scientific-cultural training with a view to humanizing students, propose a training dynamic for teachers that emphasizes pragmatism, immediacy, and technicality. There is, therefore, an opposition of ideas and a gap between theoretical discussions that defend continued training from a critical-reflective perspective and the BNC-continuous training guidelines.

In the curriculum dimension, Manga (2017) investigated the process of continuing training of teachers in the Special Education modality who work in the final years of elementary
school and how this training impacts the school inclusion of blind students. Figueiredo (2017) analyzed teachers' conceptions about the contextualization of Science teaching, emphasizing the implications of this education for the formation of a diversified curriculum that meets specificities.

The results of the two scientific productions included in this dimension, summarized in Figure 6, point to continued training as a means to alleviate gaps in initial training. Therefore, without a continuous training process that encourages the (re)construction of knowledge, these gaps make it difficult for teachers to respond to the curricular demands that arise in their pedagogical practices.

**Figure 6 - Curriculum**

The interrelationships between continuing education and curriculum are defended by Manga (2017), when he states that it can be a means of learning for educators to develop the knowledge necessary to work in Special Education aimed at blind students. Figueiredo (2017) also highlights continuing education as a possibility for developing and implementing a curriculum that meets the specificities of each Science teaching context.

The direction of these two studies is consistent with the concept of curriculum discussed by Sacristán (1998, p. 123, our translation), when he states that in “[...] more recent meanings, [...],”
the curriculum deals with how the educational project is carried out in the classroom.” In other words, we must pay attention not only to the project but also to its practical development. It is in this sense that Manga (2017) and Figueiredo (2017) present continuing education as a scope for building knowledge for teachers to be able to deal with the challenges that the implementation of curricular issues imposes on them.

Moreira and Candau (2008, p. 19, our translation) also highlight that the teacher has an essential role in the curricular process, as “[... he is one of the great artisans, whether he likes it or not, in the construction of the curricula that materialize in schools and classrooms.” This does not mean attributing all responsibilities for the success or failure of school actions to the teacher, but, recognizing their role and the intentions developed in pedagogical practices with autonomy and criticality. Given the curricular demands that reach the school, this construction requires, according to Moreira (2021), the inclusion of reflections on the curriculum in teacher training.

Given this context, the discussions developed within the scope of academic research on continuing education contribute to the necessary changes, whether in the context of policies, practices, or the curriculum, being established and materialized. One of these concrete aspects, which already corresponds to the development process, especially in professional master's programs, which focus on action research, but with the need to continually affirm itself, is the conception of the reflective teacher, that is, the professional researcher, who is not a simple applicator of theoretical knowledge. He studies and reflects on his practice and can transform it based on the back-and-forth movement supported by action-reflection-action.

Final considerations

This research analyzed scientific productions about continuing education for elementary school teachers, through a state of knowledge survey. The methodological path allowed the systematization and discussion of the main findings in the mapped productions, providing the opportunity for reflections to emerge based on approaches to the advances and challenges present in the contexts of continuing teacher training.

In this investigation, we discuss three dimensions: pedagogical practices, policies, and curriculum, linked to teacher continuing training. In the context of pedagogical practices, the continued training process helps teachers understand the inseparability between theory and
practice in learning spaces and teaching. This process, aimed at reflecting on teaching practice, provides opportunities for professional development.

Regarding issues of educational programs and policies, we found that neither meets the specific demands of the Brazilian educational system since the interfaces of these programs and policies are of interest to private sectors. Therefore, there is no analysis of the needs of the school community and, consequently, no significant impacts of teaching are provided.

The mapping of scientific productions signals that continued training, from a critical and reflective perspective, promotes the professional development of teachers. Furthermore, this type of training can also have significant impacts on closing gaps related to teaching knowledge necessary for the field of the initial academic career curriculum.

REFERENCES


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