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Teacher Training in Basic Education: a systematic literature review

ARTICLE

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Abstract

This study aims to identify the importance and challenges in the continuous training of Basic Education teachers. It is a systematic literature review using the Methodi Ordinatio method, covering the period from 2019 to 2023, with data from the Web of Science, Scopus, and SciELO databases, using the descriptors "teacher training" and "basic education." Initially, 572 articles were listed, resulting in 16 after applying the exclusion criteria. Continuous training determines teaching success, requiring overcoming weaknesses, teacher collaboration, and regional public policies. The main challenges include the need for more financial and material resources, limited time for full-time teachers, overcoming traditional models, and valuing research, teaching, and extension in education. It is concluded that continuous training is essential but faces challenges such as a lack of resources and time and adapted public policies, requiring experience exchange and regional policies for improvement.

Keywords: Teacher Training. Basic Education. Technologies.

Formação Docente na Educação Básica: uma revisão sistemática de literatura

Resumo

Este estudo visa identificar a importância e os desafios na formação continuada de professores da Educação Básica. Trata-se de uma revisão sistemática da literatura, utilizando o método Methodi Ordinatio, no período de 2019 a 2023, com dados das bases Web of Science, Scopus e SciELO, utilizando os descritores "teacher training" e "basic education". Inicialmente. 572 artigos foram listados. resultando em 16 após a aplicação dos critérios de exclusão. A formação continuada determina o sucesso do ensino, exigindo superação de fragilidades. colaboração entre professores e políticas públicas regionais. Os principais desafios incluem a falta de recursos financeiros e materiais, a restrição de tempo para professores com jornadas integrais, a superação de modelos tradicionais e a valorização da pesquisa, ensino e extensão na educação. Conclui-se que a formação continuada é essencial, mas enfrenta desafios como falta de recursos, tempo e políticas públicas adaptadas, necessitando de troca de experiências e políticas regionais para sua melhoria.

Palavras-chave: Formação Docente. Educação Básica. Tecnologias.

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1 Introduction

Continuous training for teachers working in basic education has emerged as a pressing and significant need in the contemporary educational context, as it covers various dimensions of practical knowledge, encompassing the acquisition of theoretical knowledge, the development of skills, the management of emotions and the construction of values and attitudes which, in a synergistic way, contribute to improving the professional effectiveness of teachers and their pedagogical practice (Arévalo, 2022).

Programs aimed at this kind of training are generally available in face-to-face formats, offering individual technical training modalities, which can include courses and seminars. In addition, it is increasingly common to adopt online modalities in order to improve teachers' skills in the use of Information and Communication Technologies (ICTs) (Dueñas; Bustamante; Huayta-Franco, 2023).

Teacher training is an indispensable factor in improving the quality of the education system. This emphasis on training has been driven, in part, since the enactment of the National Education Guidelines and Bases Law (LDBN), Law No. 9.394/96, which established guidelines and regulations for the Brazilian education system (Brasil, 1996). The LDBN, among other topics, addresses continuing teacher training, evidenced in Art. 62 of the document, aimed at the exercise of teaching in Basic Education.

Gabriel (2022) argues that the continuing education of basic education teachers should be understood as a formative and performative process, encompassing different learning modalities: formal (courses and workshops), non-formal (study groups) and informal (practical experience). The combination of these modalities is necessary because it promotes reflection, the exchange of experiences and the construction of identity. Interaction with colleagues, reflection on practice and participation in scientific events are fundamental, helping teachers to remain constantly reflective and improve their educational practice.

In order for this necessary reflection to take place, Brazil has the National Basic Education Teacher Training Plan (Parfor), an initiative of the Coordination for the

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Improvement of Higher Education Personnel (CAPES). Parfor seeks to adapt the initial training of teachers working in the public basic education network, offering degree courses corresponding to their areas of expertise. This initiative aims to provide high-quality higher education, free of charge, to teachers who lack adequate training, with courses offered in person or at a distance (Ferreira, 2022).

Vivian and Goi (2021) highlight the relevance of CNE/CP Resolution No. 1 of 2020, which establishes specific guidelines for the organization of continuing education courses and actions for Basic Education teachers. This resolution is aligned with educational policies and the needs of society, guiding continuing education practices throughout the national territory, aiming to improve basic education and the professional development of teachers, considering the various levels, stages and modalities of education.

Another model used in continuing education is teacher performance evaluation, which, although it can encourage professionalization and improve the quality of teaching, can also lead to standardization and bureaucratization, limiting autonomy and demotivating teachers. Personal biases on the part of evaluators can compromise impartiality. It is important to consider quantitative and qualitative criteria when implementing these evaluations, balancing the need for evaluation with respect for autonomy and valuing education professionals (Vivian; Goi, 2021).

Costa, Matos and Caetano (2021) address the continuing education of basic education teachers based on the National Education Plan (PNE), Law No. 13.005/2014. The PNE establishes two specific actions: to train 50% of basic education teachers at postgraduate level by the last year of the PNE's validity and to guarantee opportunities for participation in continuing education programs, aligned with their areas of expertise, considering the needs, demands and contexts of education systems. This means that, in addition to initial qualification, teachers must have access to continuous and contextualized opportunities for updating and improvement throughout their careers, demonstrating a commitment to promoting the appreciation and professional development of teachers, with a view to the quality of education offered in schools.

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A fundamental strategy for the success of continuing education is its effective integration into everyday school life. This integration improves both teachers' learning and the quality of teaching offered to students. The process, characterized by the promotion of interactions and reflections between teachers on their pedagogical practices, directly impacts the school environment and student performance (Silva; Souza, 2022).

The aim of this study is to identify the importance and challenges of continuing education for primary school teachers. Based on this identification, it is possible to improve integration between peers, strengthen teachers' capacity for action in teaching practice and, consequently, contribute to improving the quality of education in Brazil. This involves not only the acquisition of theoretical knowledge, but also the development of skills, emotional management and the construction of values. In order to integrate continuing training into the everyday school context, it is necessary to improve both teachers' learning and the quality of teaching offered to students.

2 Methodology

This study is a systematic literature review, using the Methodi Ordinatio (Pagani; Kovaleski; Resende, 2015), which guides the search, selection, collection and classification of scientific articles with the support of Information and Communication Technologies. Mendeley and JabRef software were used for data collection. The distinguishing feature of this method is the InOrdinatio search, an Excel tool that helps in the selection of scientific articles by providing an ordering coefficient based on scientific relevance. This coefficient takes into account the impact factor, the year of publication and the number of citations, ordering them in descending order.

The application of this method followed nine steps:

Step 1 - Establishing the research intention

At this stage, the most suitable descriptors and combinations were identified to answer the following question: what is the importance and challenges of continuing education for primary school teachers?

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- Step 2 Exploratory search with the descriptors in the databases
 The descriptors and combinations identified in Step 1 were tested on the Web of Science, Scopus and SciELO databases, using Mendeley software to remove duplicate articles.
- Step 3 Defining the combination of descriptors and databases to be used. The databases tested in Stage 2 were approved because they had a significant volume of publications with the descriptors searched and wide availability of access to published materials. The combination "teacher training" AND "basic education" in English was defined for the search, in order to cover more research and reach a greater number of studies, regardless of the original language. The period considered in the search was from 01/01/2019 to 28/08/2023.
- Step 4 Final database search
 The search resulted in a gross total of 572 articles (SciELO n=78; Scopus n=253;
 Web of Science n=241), using Mendeley software to manage, collect and store the references. The results were considered satisfactory and there was no need to expand the databases.
- Step 5 Filtering procedures
 At this stage, duplicate papers, papers presented at conferences, books or book chapters and those whose title or abstract did not adhere to the theme of this study were eliminated. Mendeley and JabRef software were then used to build a portfolio of articles with research potential. After applying the filtering procedures, 57 articles remained.
- Step 6 Identifying the impact factor, year of publication and number of citations
 Using the RankIn spreadsheet provided by the authors of Methodi Ordinatio, the
 impact factor of the publications was identified (last year JCR or SJR). The number
 of citations was retrieved from Google Scholar on September 2, 2023, using the
 links provided in the RankIn spreadsheet.
- Step 7 Sorting the articles using InOrdinatio

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Rev.Pemo - Revista do PEMO



The studies were ranked using the InOrdinatio equation (Pagani; Kovaleski; Resende, 2015), which classifies the relevance of the documents to the research:

InOrdinatio = (Fi / 1000) + (α^* (10 - (AnoPesq – AnoPub))) + (\sum Ci) Where: Fi = Impact factor of the journal; α^* = coefficient attributed by the researcher to the relevance of the year of publication, ranging from 1 to 10; AnoPesq - Year of the search in the databases; AnoPub = year of publication of the article; \sum Ci = number of article citations.

- Step 8 Locating articles in full format
 The papers were located directly on the journal's website, through the CAPES
 Journal Portal, using institutional CAFe access.
- Stage 9 Systematic reading and analysis of the articles
 At this stage, the selected articles were read in full, excluding those that did not provide elements to answer the research question. To avoid saturation and excess information, the composition of the documentary corpus was limited to up to 30 articles with positive results in the InOrdinatio equation. However, the final number of articles was 16, not reaching the established saturation point.

The stages are shown synoptically in Figure 1.

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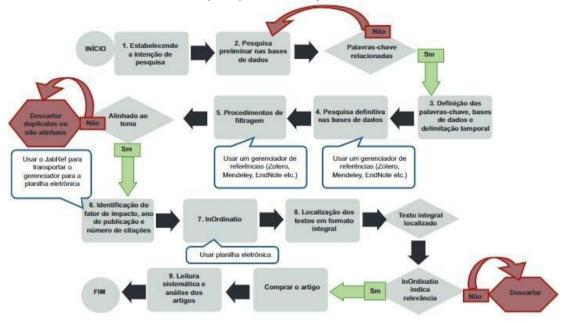




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Figure 1: Steps of the Methodi Ordinatio and the use of Information Communication Technologies (ICTs) in each step



Source: Adapted from Pagani, Kovaleski, Resende, 2017.

3 Results

Table 1 summarizes the results of the selection of articles on the continuing education of basic education teachers after sorting them using InOrdinatio. This table includes details such as the authors, citation, impact factor, year and InOrdinatio coefficient of each article selected.

Table 1: Result of the selection of articles on the continuing education of basic education teachers after sorting the articles using InOrdinatio

Author(s)	Citation	Impact Factor	Year	InOrdinatio
Zerbato e Mendes	1	0,6	2021	51,0006
Dueñas, Bustamante e Huayta-Franco	0	-	2023	50
Souza e Rocha	0	-	2023	50
Aranha e Oliveira	0	-	2023	50
Arévalo	3	0,5	2022	48,0005
Vasquez e Sarti	1	0,6	2022	46,0006
Rocha e Lagares	1	-	2022	46
Bianch, Côco e Alves	0	-	2022	45

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PRÁTICAS EDUCATIVAS, MEMÓRIAS E ORALIDADES

Rev.Pemo - Revista do PEMO



Ferreira	0	-	2022	45
Silva e Souza	0	-	2022	45
Gabriel	0	-	2022	45
Locatelli	4	-	2021	44
Vivian e Goi	3	-	2021	43
Silverio e Isobe	7	-	2020	42
Costa, Matos e Caetano	1	0,3	2021	41,0003
Costa Filho e Iaochite	0	-	2021	40

Source: Author.

Table 2 provides an overview of the studies that make up the research corpus. This table describes the objectives, the population/sample involved in the research and the conclusions presented in the selected articles.

Table 2: Overview of the studies that make up the research corpus

Author(s)	Objective	Population/Sample	Conclusions
(year) Zerbato e Mendes	To investigate whether a teacher training program	Ten primary school teachers and seven undergraduate	Training strategies based on UDL (Universal Design
(2021)	based on this theme would result in practices that achieve greater participation and learning for special education students in the ordinary classroom.	students.	for Learning) and collaboration were effective in promoting teaching actions aligned with diversity and for the initial and ongoing training of participants.
Dueñas, Bustamante e Huayta- Franco (2023)	To analyze the academic contributions of continuing education programs for primary school teachers.	Systematic review, using 12 scientific articles, 4 of which were quasi-experimental, 4 descriptive correlational, 3 causal correlational and 1 pre-experimental.	Continuing teacher education programs offer learning opportunities, promote the development of inclusive education and cultivate positive relationships between students and teachers.
Souza e Rocha (2023)	To point out the incursion of neoliberal ideals into teacher training policies in Tocantins as a reflection of the policies adopted at national level, relating the need to improve these policies in favor of neoliberal postulates, which also encompass the basic education curriculum.	Brazil's teacher training policies and their reverberations in Tocantins and in the Education System, and points out the close relationship between neoliberal postulates, teacher and student training in basic education materialized in the publication of the BNCC, is based on bibliographic review and documentary analysis.	It points to a close relationship between teacher training policy reforms and basic education curriculum policy, exposing the subordination of education policy documents to market interests.

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Memorias e Oralitation

PRÁTICAS EDUCATIVAS, MEMÓRIAS E ORALIDADES

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Arávala	To analyze the process of expansion of private organizations in the field of education between 2013 and 2021.	Documentary and bibliographic analysis, with the main sources being the documents from the external loan agreement between the IDB and Manaus City Hall.	The study highlights the negative implications of the public-private partnership system in Manaus' education policy on continuing teacher training, representing a significant threat to the democratization of public education in the region.
Arévalo (2022)	To identify the concerns presented by teachers in the context of virtual education through the development of the Lesson Study methodology, specifically in the problematization phase.	Doctoral research carried out in the Basic Education career, distance learning modality of the Teacher Professionalization Plan at the Universidad Nacional de Educación-UNAE-Ecuador.	The teaching function faces challenges and uncertainties, highlighting the need for continuous training addressing various dimensions to address specific needs.
Vasques e Sarti (2022)	To analyse the organization, training devices, conceptions of practice and knowledge present in the First Degree Course in Pedagogy of the National Basic Education Teacher Training Plan (Parfor).	Seven campuses in different regions of the country, with analysis of official documents and interviews with course coordinators.	The results indicate the need to establish a professional culture of teacher training located at the intersection between the workplace and the university.
Rocha e Lagares (2022)	To identify the concept of "competence" in the BNCC and BNC-Formação.	Theoretical review and documentary research of the manifestations of entities/associations and official government documents BNCC (2017) and BNC-Formação (2019) from the Capes portal for 2018, 2019, 2020 in the northern region of Brazil.	The BNCC and BNC-Formação have fragmented the principle of integration between the stages of basic education, and have directed and aligned national education with the neoliberal project and privatist logic.
Bianch, Côco e Alves (2022)	To analyze the training profile of teachers working on face-to-face Pedagogy courses at the Federal Institutes, focusing on early childhood education in their initial training.	Documentary analysis of 532 Lattes CVs of teachers linked to 27 courses, identifying undergraduate and postgraduate degrees of these teachers.	Heterogeneity in academic trajectories, interdisciplinary nature of courses, implications for graduation, specificities for early childhood education. It points to the need to invest in the continuing education of teacher trainers and to value research, teaching and extension focused on education, in connection with the training of teachers

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PRÁTICAS EDUCATIVAS, MEMÓRIAS E ORALIDADES

Rev.Pemo - Revista do PEMO



			to work in the first stage of basic education.
Ferreira (2022)	To carry out an analysis of the Local Coordination of On-site Parfor at UFMA as a constituent part of the training process for basic education teachers, getting to know the process of choosing this professional, investigating their role as an articulator between the university, the municipality and the academic community.	Bibliographic, documentary and field research, with seven local coordinators from municipalities that have participated in Parfor Presencial in the state of Maranhão.	The relevance of face-to-face Parfor to the basic education scenario in Brazil and in the state of Maranhão. The field research achieved the proposed objectives, resulting in a consistent analysis capable of contributing to future actions aimed at improving the quality of the Continuing Teacher Education process.
Silva e Souza (2022)	To understand the meanings attributed to ongoing training in everyday school life.	Six elementary school teachers from the municipality of Feira de Santana, Bahia.	There are training singularities that take place in Feira de Santana in the specificities of teaching in everyday school life, making it possible for the voice of the collaborating teachers to flow, showing how ongoing training takes shape in the practices, knowledge and actions developed in the school.
Gabriel (2022)	Reflect on the influence of reference groups on teacher training and performance.	Research and training with basic education teachers in the north of the country.	Configuration and refiguration of the teacher's identity, identification of the intervening factors of the school system that limit or favor the achievement of pedagogical objectives and modulate the power to act in the face of the challenging experiences of the school group and context, by mastering the meaning of their educational practices.
Locatelli (2021)	To evaluate the extent and orientation of teacher training policy for basic education in sub-national education plans.	Education plans of the 26 states and the Federal District.	The research highlights that there are significant variations in its implementation in different states, and that its effectiveness depends largely on the efforts of teachers.

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Vivian e Goi (2021)	To obtain information on the development of continuing education actions, not involving personal aspects.	Four Regional Education Coordinating Offices (CRE) in the state of Rio Grande do Sul, which meet the demands of state schools.	It was possible to observe aspects relating to the general characteristics of continuing education actions, the subjects covered and the existence of specific training for teachers in each area of knowledge.
Silvério e Isobe (2020)	To think about the importance, need and challenges of continuing training for basic education teachers as a public policy.	Training courses for basic education professionals run by the Ministry of Education's (MEC) Secretariat for Continuing Education, Literacy, Diversity and Inclusion (Secadi) via federal universities.	Continuing education is necessary and urgent, an action that should definitely be incorporated into the public agenda committed to implementing policies for rural education.
Costa, Matos e Caetano (2021)	To provoke reflections on the intentionality of Resolution CNE/CP No. 1, of October 27, 2020, specifically the BNC-Continuing Education, and its implications for teaching work and the training process of basic education students.	Bibliographic and documentary text based on CNE/CP Resolution No. 1/2020.	The research showed that the neoliberal capitalist system has produced new arrangements in the labor market, which directly affect education, teachers and their initial and continuing training to adapt workers to the dictates of capital.
Costa Filho e laochite (2021)	To critically analyze the studies surveyed in relation to the results obtained in continuing education courses mediated by DICTs and the factors associated with teacher learning.	11 studies on continuing teacher training mediated by DICTs on the subject of health at school.	Training with ICT can be an important element in teacher development, training processes and teaching quality in basic education, but more attention is needed on how these processes take place.

Source: Author.

4 Discussion

In this study, the literature review focused on analyzing the current approach to continuing education for primary school teachers, with the underlying research question being "What is the importance and challenges of continuing education for primary school teachers?". To achieve this objective, a systematic method was adopted, the Methodi Ordinatio, for selecting and presenting the results of relevant studies.

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The research corpus consists of 16 articles on the continuing education of teachers working in Basic Education, as shown in Table 1. Table 2 presents a synopsis of these articles, including the authors, objectives, population/sample and conclusions of the research.

Analysis of the data revealed that continuing education is fundamental to promoting initiatives that encourage investment in this segment. Zerbato and Mendes (2021) highlight the need for initial and continuing training programs that encourage reflection on everyday school life, enabling the exchange of experiences and the collective construction of new pedagogical knowledge. Training strategies based on Universal Design for Learning (UDL) and collaboration were effective in promoting teaching actions aligned with diversity and for the initial and ongoing training of participants.

Aranha and Oliveira (2023) warn about the influence of the public-private partnership system on continuing teacher training, highlighting the negative implications of this system on Manaus' education policy and on continuing teacher training. The authors point out that these partnerships bring mercantilist strategies that establish a lucrative terrain in the educational sphere, becoming part of the process of "commodification" of continuing teacher training and strongly threatening the process of democratization of public education.

Vasques and Sarti (2022) stress that continuing education must be integrated into everyday school life, taking into account the accumulated experience and previous knowledge of teachers, as well as the particularities of working environments. The research indicated the need to create a professional culture of teacher training located at the intersection between the workplace and the university. Ferreira (2022) adds that this process must be emancipatory, enabling the formation of critical and autonomous individuals. The field research carried out by Ferreira (2022), with local Parfor coordinators, achieved the proposed objectives, resulting in a consistent analysis capable of contributing to future actions aimed at prioritizing quality in the Continuing Teacher Education process.

Continuing education programs, both face-to-face and online, offer a variety of activities, such as tutorials, practical essays, manuals, presentations, real-time discussions

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PRÁTICAS EDUCATIVAS, MEMÓRIAS E ORALIDADES



Rev.Pemo - Revista do PEMO



and online forums, with the aim of improving teachers' professional competence (Dueñas; Bustamante; Huayta-Franco, 2023). Continuing teacher education programs offer learning opportunities, promote the development of inclusive education and cultivate positive relationships between students and teachers. Costa Filho and laochite (2021) highlight the importance of digital technologies in teacher training, improving training processes and the quality of teaching. The authors emphasize that teacher training can be mediated by digital technologies, which is considered a relevant element for teacher development, as well as for training processes and improving the quality of teaching in Basic Education.

Continuing education can take place in various ways, such as courses, lectures, workshops, study groups and seminars, depending on the objectives, needs, target audience and resources available (Arévalo, 2022; Dueñas; Bustamante; Huayta-Franco, 2023; Ferreira, 2022; Locatelli, 2021; Zerbato; Mendes, 2021). Gabriel (2022) emphasizes the importance of combining formal, non-formal and informal learning, including reflection on practice and participation in scientific events. For Gabriel (2022), continuing teacher education involves formal, non-formal and informal learning processes, including dialogue between peers, reflection on action, the epistemology of educational practice, interactions with students, knowledge of practice, the community, participation in scientific events and the socialization of knowledge. The materiality of this process requires teachers to be in a state of theoretical-methodological and autobiographical vigilance in order to unveil the object of educational practice, in other words, to always be in search of updating and reflecting on their practice.

Locatelli (2021) highlights the importance of *lato sensu* and *stricto sensu* postgraduate courses in continuing education, helping to deepen specific knowledge and improve teaching practice. *Lato sensu* postgraduate courses are one of the main forms of continuing education, as they allow for in-depth knowledge in specific areas and help to improve teaching practice. *Stricto sensu* postgraduate courses, which include master's degrees and doctorates, aim to train researchers and can be an option for those who wish to pursue an academic career.

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In terms of duration, continuing training courses usually range from 20 to 120 hours (Costa Filho; lochite, 2021). The most common types include refresher courses, extension activities and development courses, which can take place during school vacations or concurrently with the school year (Vivian; Goi, 2021). Costa, Matos and Caetano (2021) emphasize that continuing education should be a continuous and systematic process, involving critical reflection on teaching practice, deepening pedagogical knowledge of the content, the use of active learning methodologies and collaborative work between peers. For these authors, this training must be coherent with educational policies and the demands of society, being planned and implemented in an articulated manner between the different spheres of government and the various actors involved in the training process.

Recurring challenges, such as the scarcity of material and financial resources, time constraints and the lack of adequate public policies, are pointed out by various studies (Bianch; Côco; Alves, 2022; Silva; Souza, 2022; Souza; Rocha, 2023; Vivian; Goi, 2021; Zerbato; Mendes, 2021). Vasques and Sarti (2022) emphasize the need to overcome traditional and fragmented models, while Silvério and Isobe (2020) highlight the importance of public policies that guarantee access to continuing education and value the teaching profession. Silvério and Isobe (2020) mention that the lack of public policies that consider the uniqueness of each context, both at the federal and state government levels, has been identified as a major concern. In the context of rural education, there is a need to complement incipient initial training, supporting theoretical and practical professional development.

In order to improve continuing teacher training programs, valuing research, teaching and extension focused on education is essential (Bianch; Côco; Alves, 2022). Evaluating training policies and the contributions of existing postgraduate models is extremely important (Locatelli, 2021). Vasques and Sarti (2022) suggest the need for innovative initiatives that promote training experiences tailored to teachers' working conditions and careers, recognizing that students are at different stages in their teaching lives.

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Gabriel (2022), Rocha and Lagares (2022), Silva and Souza (2022) and Zerbato and Mendes (2021) agree that promoting the exchange of experiences between colleagues and critical reflection on teaching practice are fundamental to overcoming challenges. Creating reference groups and strengthening the intersection between the workplace and the university are effective strategies in this context. Gabriel (2022) suggests that continuing teacher training can be enriched by creating reference groups, promoting the exchange of experiences and the collective construction of knowledge in the school context.

In general terms, this literature review has provided a comprehensive analysis of continuing education for primary school teachers, revealing both the advances and the challenges in this educational scenario. The promotion of continuing education initiatives plays a decisive role in improving teaching and student learning, but faces significant obstacles, such as the lack of financial and material resources, time constraints and the absence of public policies that are sensitive to the particularities of each context. There was convergence in the body of research that continuing education should be conceived as a process integrated into everyday school life, enriching not only teachers' repertoire of knowledge, but also their role in forming critical and autonomous citizens. The use of digital technologies and valuing research, teaching and extension are essential elements for teachers' professional development and improving the quality of teaching. In addition, the need to foster a culture of collaborative and reflective work among teachers is clear, enabling the exchange of experiences and the collective construction of knowledge. This approach can be strengthened through the creation of reference groups and the intersection between the workplace and the university, as suggested by various studies. The study also served as a reminder of the need for interconnection between reforms in teacher training policies and the curriculum policy for basic education. In some cases, the influence of the education market can compromise the democratization of public education, highlighting the importance of maintaining an appropriate balance between commercial interests and a commitment to quality education for all students. As progress is made,

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strategies need to be developed to strengthen continuing teacher training, ensuring a more effective and inclusive educational environment.

5 Conclusions

This study sought to identify the importance and challenges of continuing education for primary school teachers, using the Methodi Ordinatio method to carry out a systematic literature review. Continuing education is essential for successful teaching and learning, as it promotes constant updating of teachers and the development of their theoretical and practical skills.

Among the main challenges identified are the lack of material and financial resources, the restriction of teachers' time and the absence of public policies suited to the various educational realities. Continuing education must be integrated into everyday school life, facilitating the immediate application of the knowledge acquired.

To overcome these obstacles, public policies are needed that encourage continuing training and are adapted to the different educational realities. Exchanging experiences between peers, encouraging a culture of collaborative work and valuing research, teaching and extension are fundamental to improving teachers' ongoing training.

Continuing education is a *sine qua non* for the quality of basic education in Brazil, and tackling its challenges requires a strategic and contextualized approach. Promoting training initiatives that are inclusive and tailored to teachers' needs can make a significant contribution to teachers' professional development and to improving teaching and student learning.

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