

## **CONTINUING TEACHER EDUCATION: ONGOING PROFESSIONAL DEVELOPMENT TO INNOVATE, REFLECT, AND TRANSFORM TEACHING PRACTICE**

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**Sirlene Karin Minozzo Finkler<sup>1</sup>, Felipe Antonio Xavier Andrade<sup>2</sup>, Gerson Samuel Machado<sup>3</sup>, Sabrina Sales Pinto Lima<sup>4</sup>, Ricardo Aparecido Tanaka<sup>5</sup>, Maria Regina Zirondi<sup>6</sup> and Eugênio Jesus Santana<sup>7</sup>**

### **Abstract**

This study analyzes the contributions of continuing teacher education to teachers' professional development, highlighting its role in pedagogical innovation, critical reflection, and the transformation of teaching practice. This qualitative bibliographic study is based on Brazilian and international scientific publications, as well as official documents concerning teacher education and educational policies. The literature reviewed indicates that continuing teacher education programs improve pedagogical practices, strengthen professional autonomy, expand teachers' ability to use innovative methodologies, and contribute to building more inclusive, collaborative, and student-centered educational environments. The studies also show that professional development processes grounded in collective reflection, inquiry into

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<sup>1</sup> Master's student in Emerging Technologies in Education at Must University. Degree in Education Specialist in Digital Education for the Early Years of Elementary School from UNICENTRO - Universidade Estadual do Centro-Oeste  
E-mail: sk.karinmf@gmail.com

<sup>2</sup> Master's student in Emerging Technologies in Education at Must University  
E-mail: felipexavier@uol.com.br

<sup>3</sup> Master's degree in Business Administration from MUST University. Holds an MBA in Human Resources from INPG and graduate specializations in Higher Education Teaching from UFRJ, Vocational and Technological Education Teaching from IFES, and Production Engineering from FATEC  
E-mail: gersonax@yahoo.com.br

<sup>4</sup> Master's student in Emerging Technologies in Education at Must University. Degree in Education from Instituto Educacional Nossa Senhora de Lourdes. Specialist in Early Childhood Education and the Early Years of Elementary School from Universidade Candido Mendes  
E-mail: sabrinasales25481@student.mustedu.com

<sup>5</sup> Master's degree in Business Administration, with an emphasis on Finance, from MUST University Degrees in Economics and Accounting from FECAP. Holds a graduate specialization in Controllershship and Accounting from FECAP and an MBA in Business Management from Fundação Getulio  
E-mail: ricardotanaka24452@student.mustedu.com

<sup>6</sup> Master's student in Emerging Technologies in Education at MUST University. Degree in Education, with graduate specializations in Integrated Management and Specialized Educational Assistance (Atendimento Educacional Especializado—AEE)  
E-mail: mregina.zirondi@gmail.com

<sup>7</sup> Doctoral student in Education Sciences at Christian Business School (CBS) and holder of a master's degree in Emerging Technologies in Education from MUST University  
E-mail: eugeniojsant@gmail.com

one's own practice, and collaboration among teachers produce more consistent outcomes than isolated training initiatives. Nevertheless, challenges remain concerning discontinuities in public policies, time constraints, teachers' working conditions, and the need to consolidate institutional cultures focused on ongoing professional learning. It is concluded that continuing teacher education is a strategic means of strengthening teachers' professional identity and promoting education committed to innovation, teaching quality, and students' holistic development.

**Keywords:** Continuing teacher education, Educational innovation, Pedagogical practice, Teacher professional development.

## INTRODUCTION

The profound social, technological, cultural, and educational transformations that have occurred in recent decades have significantly increased the demands associated with teaching, making continuing teacher education an essential component of teachers' professional development. Growing classroom diversity, the incorporation of digital technologies into educational processes, the consolidation of inclusive education, curricular changes, and the need to develop competencies suited to contemporary society require teachers to continually update their knowledge, reflect critically on their practices, and devise new teaching strategies. As António Nóvoa (2022) states, teacher professional development is not limited to acquiring new knowledge but entails an ongoing process of reflection, collaboration, and reconstruction of professional identity throughout one's career.

In this context, continuing teacher education is no longer understood as a set of occasional courses intended to provide technical updates, but as an ongoing process of professional learning. This perspective recognizes that teachers produce knowledge through their own experience, inquiry into their practice, and dialogue with other education professionals. According to Imbernón (2023), continuing teacher education should create opportunities for critical reflection, collaborative research, and the

collective construction of knowledge, thereby fostering effective changes in pedagogical practices and strengthening teacher autonomy.

The importance attributed to continuing teacher education is supported by Brazilian educational policies. The National Education Guidelines and Framework Law (Lei de Diretrizes e Bases da Educação Nacional—LDB), Law No. 9,394/1996, establishes that education systems must ensure opportunities for teachers' professional improvement. In addition, the National Common Framework for the Continuing Education of Basic Education Teachers (Base Nacional Comum para a Formação Continuada de Professores da Educação Básica—BNC-Formação Continuada) (Brazil, 2020) stipulates that teacher professional development should be grounded in ongoing educational processes aligned with the needs of pedagogical practice, the demands of schools, and the development of the professional competencies required for teaching.

In addition to updating scientific knowledge, continuing teacher education helps strengthen teachers' capacity to innovate, investigate, and transform their pedagogical practices. The incorporation of active methodologies, digital technologies, inclusive strategies, formative assessment, and interdisciplinary practices requires professional development processes that extend beyond the technical dimension and promote ongoing reflection on the profession's everyday challenges. As Tardif (2014) emphasizes, teacher knowledge is continually constructed through the intersection of academic education, professional experience, and interaction with different professional contexts, making professional learning an ongoing and dynamic process.

Nevertheless, despite recognition of the importance of continuing teacher education, challenges remain concerning fragmented public policies, insufficient time allocated for study, teachers' working conditions, and professional development programs that are disconnected from schools' actual needs. As Gatti (2021) argues, teacher education policies produce more consistent results when they are aligned with the pedagogical practices developed in schools and grounded in critical reflection on teaching and learning processes.

Against this background, the following guiding question emerges: How does continuing teacher education contribute to teachers' professional development and to the innovation, reflection, and transformation of teaching practice?

To address this question, the general objective of this study is to analyze the contributions of continuing teacher education to teacher professional development, highlighting its role in pedagogical innovation, critical reflection, and the transformation of educational practices.

The specific objectives are to:

- (i) understand the theoretical foundations of continuing teacher education;
- (ii) discuss the relationships among professional development, reflection on practice, and pedagogical innovation;
- (iii) identify the challenges associated with implementing continuing teacher education policies; and
- (iv) analyze the contributions of professional development processes to improving the quality of teaching and learning.

This study is justified by the need to strengthen teacher education policies and practices capable of responding to the challenges of contemporary education. In a society characterized by rapid transformations and the growing complexity of educational processes, investing in continuing teacher education means promoting teachers' professional development, improving the quality of pedagogical practices, and contributing to a more democratic and inclusive education committed to meaningful student learning.

## **THEORETICAL FRAMEWORK**

Continuing teacher education is one of the principal structural pillars of teacher professional development and is understood as an ongoing process of constructing, updating, and reinterpreting the knowledge required for teaching. Rather than being limited to isolated professional development activities

or technical training, continuing teacher education should be understood as an ongoing process pursued throughout a teacher's professional career. This trajectory combines scientific knowledge, experiences developed in everyday school life, critical reflection, and collaborative learning, helping teachers expand their knowledge and continually improve their pedagogical practices (Augusto et al., 2026). As Nóvoa (2022) states, teacher education does not end with initial teacher preparation but is consolidated throughout one's professional life through ongoing processes of inquiry, collaboration, and reconstruction of teacher identity. This perspective shifts the focus from content transmission to the collective construction of professional knowledge.

The continuity of this professional development process is reinforced by Rosemberg (2002, p. 138), who states:

“Continuing education is a requirement of the present day. It may therefore be stated that teacher education occurs along a continuum, beginning with basic education and subsequently supplemented by initial teacher education programs, which equip teachers to act in social practice and participate in the world and the labor market.”

Teacher education is therefore understood not as an isolated stage, but as a trajectory that begins even before entry into the profession and remains under construction throughout one's career. In addition to accompanying teachers throughout their professional trajectories, continuing teacher education helps overcome limitations arising from initial teacher preparation and address concrete problems experienced in everyday school life. Curricular changes, new technological resources, social transformations, and differing learning needs require continual updating and a willingness to reconstruct knowledge. In this regard, Camilotti and Gobara (2021, p. 18) emphasize that “continuing and ongoing education is an essential instrument for the collective emancipation of pedagogical practices.”

The understanding of teaching as a reflective profession is strongly supported by Schön's contributions (2000). According to the author, professionals face complex and unpredictable situations that cannot be resolved solely through the mechanical application of previously acquired knowledge.

Teaching practice therefore requires continuous processes of reflection-in-action and reflection-on-action, enabling teachers to critically analyze their experiences and continually reorganize their pedagogical strategies. Although this is a classic work, its approach remains widely used in contemporary teacher education research because it provides a sound basis for understanding professional practice as an ongoing space for learning.

Maurice Tardif's contributions (2014) are also fundamental to this discussion. The author understands teacher knowledge as the result of integrating academic knowledge, professional experience, pedagogical practices, and interactions established in everyday school life. According to Tardif (2014), teachers produce knowledge through their professional activities, making experience a constitutive element of teacher professionalism. This understanding reinforces the need for professional development processes that recognize everyday school life as a privileged space for knowledge production, inquiry, and professional development.

Continuing teacher education is also supported by Brazilian educational policies. The National Education Guidelines and Framework Law, Law No. 9,394/1996, establishes that education systems must ensure teachers ongoing opportunities for professional improvement. In addition, the National Common Framework for the Continuing Education of Basic Education Teachers (Brazil, 2020) stipulates that professional development should be grounded in the integration of theory and practice, pedagogical inquiry, collaboration among teachers, and the development of professional competencies suited to the contemporary challenges of education. These documents reinforce the principle that continuing teacher education is essential to ensuring the quality of the educational process.

The relationship between continuing teacher education and pedagogical innovation is also significant. Constant technological, scientific, and social transformations require teachers to develop competencies related to the use of active methodologies, digital technologies, inclusive practices, formative assessment, and interdisciplinary teaching. As Francisco Imbernón (2023) emphasizes, continuing teacher education should foster effective changes in pedagogical practices through critical

reflection, collaborative research, and collective efforts to solve problems experienced in everyday school life. From this perspective, innovation results not merely from introducing new technologies or methodologies, but from teachers' ability to critically reinterpret their practice and construct contextualized pedagogical alternatives.

Collaborative learning among teachers is one of the principal drivers of professional development. Learning communities, study groups, action research, peer observation, and collaborative projects promote the exchange of experiences, the collective construction of knowledge, and the strengthening of teachers' professional identity. Fullan (2020) emphasizes that collaborative processes strengthen schools' capacity to promote innovation and continuous improvement by enabling teachers to share challenges, develop joint solutions, and consolidate institutional cultures focused on ongoing professional learning.

Preparing teachers to address the challenges of contemporary education broadens this discussion. Classroom diversity, inclusive education, digital culture, the use of artificial intelligence, active methodologies, and new curricular demands require teachers who are capable of learning continuously and adapting their practices to constant changes in the educational context. Bernadete Gatti (2021) states that teacher education policies have more consistent impacts when they are aligned with schools' actual needs and foster ongoing professional development processes grounded in critical reflection, inquiry, and the improvement of pedagogical practices.

Taken together, the studies reviewed indicate that continuing teacher education is an ongoing process of professional learning that is indispensable to strengthening the quality of education and promoting pedagogical innovation. By integrating critical reflection, the collective production of knowledge, inquiry into practice, and professional development, this approach helps prepare teachers who are more autonomous, critical, and capable of responding to contemporary educational challenges, thereby contributing to the transformation of schools into ongoing spaces for learning, innovation, and human development.

Teacher professional development extends beyond the acquisition of technical knowledge, constituting an ongoing process of constructing professional identity, strengthening autonomy, and improving pedagogical practices. This perspective recognizes teaching as a complex profession characterized by the need to interpret different contexts, make decisions in unpredictable situations, and respond to constant social and educational transformations. In this regard, continuing teacher education plays a strategic role by fostering systematic processes of reflection on practice and the reconstruction of professional knowledge. Marcelo García (2021) emphasizes that teacher professional development is a continuous process of learning throughout one's career, in which experiences, knowledge, values, and institutional contexts converge in the construction of teacher professionalism.

Teacher autonomy occupies an important place in this process because it allows teachers to move beyond acting merely as recipients of predetermined professional development initiatives and begin participating in decisions concerning their own development. Santos (2024, p. 97) argues that “continuing education should empower teachers as agents of their own learning, capable of identifying their professional development needs and pursuing pathways for their professional growth.” Such active participation enables the construction of more meaningful professional development trajectories because it considers each professional's challenges, interests, and concrete experiences.

Critical reflection on practice is one of the most important foundations of continuing teacher education. Teachers cease to be mere implementers of curricular prescriptions and become researchers of their own pedagogical actions by analyzing results, identifying challenges, and continually reorganizing their teaching strategies. This perspective strengthens professional autonomy and expands teachers' capacity to respond to students' needs and transformations in the educational context. Paulo Freire (2021) states that teaching practice requires ongoing reflection because teaching entails conducting research, learning continuously, and reconstructing knowledge from lived experience. Continuing teacher education thus becomes a space for producing knowledge rather than merely updating content.

In discussing the relationship among teaching, learning, and knowledge production, Freire (1998, p. 25) states: “Teaching is not the transfer of knowledge, but the creation of possibilities for its production or construction [...] There is no teaching without learning; the two explain one another, and their participants, despite the differences that distinguish them, are not reduced to the status of objects of one another. Those who teach learn by teaching, and those who learn teach by learning. Whoever teaches, teaches something to someone.”

The integration of theory and practice is another foundation of continuing teacher education. Professional development programs based exclusively on the transmission of theoretical knowledge yield limited results when disconnected from the concrete situations teachers face. Conversely, initiatives grounded in inquiry into everyday school life foster more consistent changes in pedagogical practices. Pimenta (2020) emphasizes that teacher identity is constructed through the ongoing integration of scientific knowledge, professional experience, and critical reflection on educational action. Schools thus cease to be merely places where theories produced at universities are applied and become environments in which new pedagogical knowledge is produced.

Throughout this process, collaborative professional development plays a strategic role in professional growth. Study groups, learning communities, action research, peer observation, and institutional projects foster the exchange of experiences, the sharing of challenges, and the collective construction of solutions to problems encountered in everyday school life. Fullan (2020) states that collaborative cultures significantly strengthen educational institutions’ capacity to innovate and continually improve teaching quality because they promote ongoing professional learning based on cooperation among teachers.

Pedagogical innovation also depends on ongoing teacher education processes. Incorporating active methodologies, digital technologies, inclusive education, formative assessment, and blended learning requires teachers to develop new professional competencies capable of addressing the demands of contemporary society. Innovation, however, does not merely mean using new tools or technological

resources; it entails transforming how teaching and learning processes are understood. José Moran (2023) emphasizes that educational innovation depends on teachers' ability to reorganize their pedagogical practices, place students at the center of the educational process, and foster more participatory, collaborative, and meaningful learning experiences.

The consolidation of continuing teacher education also depends on support from public policies. The effectiveness of professional development programs depends on permanent policies aligned with the needs of education systems and committed to recognizing and supporting teachers as professionals. The National Common Framework for the Continuing Education of Basic Education Teachers (Brazil, 2020) establishes that professional development processes must address professional competencies, reflection on practice, collaboration among teachers, and improvements in student learning. This guidance demonstrates that continuing teacher education should be a structural policy of education systems rather than merely an isolated professional updating initiative.

Based on these contributions, continuing teacher education is understood as an ongoing process of professional learning grounded in critical reflection, collaboration, inquiry into practice, and pedagogical innovation. By strengthening teacher autonomy, expanding professional knowledge, and fostering the collective construction of knowledge, this approach helps transform educational practice and promote consistent improvements in the quality of education. Investing in continuing teacher education therefore means strengthening teachers' professional development and consolidating schools committed to learning, innovation, and students' holistic development.

Continuing teacher education also plays a decisive role in consolidating inclusive education and constructing pedagogical practices capable of responding to classroom diversity. Expanded access to education, the implementation of inclusive policies, and growing student heterogeneity require teachers to develop competencies related to curricular flexibility, collaborative planning, the use of diversified methodologies, and the adoption of strategies that promote learning for all. In this context, continuing teacher education enables teachers to continually update their knowledge of inclusion, human

development, and accessible pedagogical practices. Maria Teresa Eglér Mantoan (2022) states that building an inclusive school depends on educating teachers who are capable of understanding diversity as a constitutive element of education and continually reorganizing their practices to eliminate barriers to learning and participation.

Incorporating digital technologies into professional development processes expands the possibilities for professional growth. The digital transformation of education has substantially increased the demands associated with developing teachers' digital competencies, making it essential for teachers to learn how to use technologies critically, ethically, and on a sound pedagogical basis. Virtual platforms, collaborative environments, multimedia resources, artificial intelligence, and digital tools have become part of everyday school life, requiring education professionals to remain continually updated. Valente and Almeida (2021) emphasize that continuing teacher education should prepare teachers to integrate digital technologies into the curriculum in a contextualized manner, fostering methodological innovation, personalized learning, and the strengthening of digital culture in educational institutions.

Inquiry into one's own practice is one of the principal instruments of teacher professional development. By investigating challenges experienced in everyday school life, analyzing results, producing knowledge, and sharing experiences, teachers strengthen their intellectual autonomy and expand their capacity to change pedagogical practices. This perspective brings teaching closer to research by recognizing that knowledge is also produced in schools. André (2020) emphasizes that teacher-researchers develop a greater capacity to understand educational phenomena critically, devise evidence-based interventions, and construct contextualized solutions to problems encountered in everyday practice.

Strengthening teachers' professional identity is an integral part of this process. Continuing teacher education contributes to recognizing the value of the profession by broadening teachers' understanding of the social role of teaching, fostering an ethical commitment to learning, and strengthening their sense of belonging to the profession. Professional development involves not only the acquisition of technical competencies but also the construction of values, responsibilities, and a commitment to transforming

educational realities. Tardif (2014) states that teacher identity is continually constructed through the integration of professional knowledge, lived experience, and relationships established in the school context, making continuing education indispensable to strengthening teacher professionalism.

The evaluation of continuing teacher education programs must also be considered. Recent studies show that professional development produces more consistent impacts when it is ongoing, contextualized, and aligned with schools' concrete needs. Programs centered exclusively on lectures, short courses, or decontextualized training tend to produce limited changes in pedagogical practices. By contrast, initiatives grounded in collaborative learning, action research, peer observation, and the resolution of problems from everyday school life have greater transformative potential. Darling-Hammond, Hyler, and Gardner (2017) demonstrate that effective professional development programs share such characteristics as continuity, collaboration, a focus on pedagogical practice, the use of evidence, and ongoing monitoring of the changes implemented by teachers.

Despite these contributions, the consolidation of continuing teacher education still faces major challenges. These include excessive teacher workloads, insufficient time allocated for study, discontinuities in public policies, financial constraints, and an insufficient number of programs aligned with schools' actual needs. Moreover, many initiatives remain disconnected from the everyday pedagogical context, reducing their potential to transform educational practices. Gatti (2021) emphasizes that teacher education policies must constitute ongoing processes integrated into the development of educational institutions and committed to improving student learning.

In light of these contributions, continuing teacher education constitutes an ongoing process of professional development capable of strengthening teacher autonomy, promoting pedagogical innovation, consolidating inclusive practices, and improving the quality of education. By integrating critical reflection, inquiry into practice, collaboration among teachers, and scientific updating, this approach helps transform everyday school life and strengthen teachers' professional identity. Investing in continuing teacher education therefore means investing directly in the quality of learning, the recognition

of teaching as a profession, and the construction of schools capable of responding to the educational challenges of the twenty-first century.

## **METHODOLOGY**

This research is characterized as a qualitative study developed to analyze the contributions of continuing teacher education to teacher professional development, emphasizing its role in pedagogical innovation, critical reflection, and the transformation of educational practice. The qualitative approach was selected because it enables an in-depth understanding of educational phenomena while considering the pedagogical, social, institutional, and professional aspects that influence teacher education. According to Prodanov and Freitas (2013, p. 70), qualitative research: “[...] considers that there is a dynamic relationship between the real world and the subject, that is, an inseparable connection between the objective world and the subject’s subjectivity that cannot be translated into numbers.”

In terms of its objectives, this research is classified as exploratory and descriptive. Its exploratory nature stems from the need to deepen knowledge of continuing teacher education, teacher professional development, and strategies that foster innovation and improve pedagogical practices. At the same time, it is descriptive because it organizes, systematizes, and interprets scientific evidence concerning teacher education policies, professional learning processes, and transformations in educational practice. According to Gil (2022), exploratory and descriptive research contributes to broadening the understanding of the phenomena under investigation and providing a foundation for future pedagogical interventions.

Regarding technical procedures, bibliographic research was conducted based on the analysis of books, scientific articles, master’s theses, doctoral dissertations, and official documents concerning continuing teacher education, teacher professional development, professional identity, pedagogical innovation, and educational public policies. Bibliographic research is:

“[...] prepared from previously published material, consisting primarily of books, magazines, journal publications and scientific articles, newspapers, bulletins, monographs, master’s theses, doctoral dissertations, cartographic materials, and Internet sources, with the objective of bringing researchers into direct contact with all material already written on the research topic. In bibliographic research, it is important for researchers to verify the accuracy of the data obtained, noting any inconsistencies or contradictions that the works may contain” (Prodanov; Freitas, 2013, p. 54).

The selection of references prioritized publications produced between 2020 and 2025, supplemented by classic works considered fundamental to understanding teacher professionalism, continuing teacher education, and reflection on practice. Searches were performed in the Scientific Electronic Library Online (SciELO), the CAPES Periodicals Portal (Portal de Periódicos da CAPES), Google Scholar, the Education Resources Information Center (ERIC), and ScienceDirect, using descriptors in Portuguese and English, including *formação continuada de professores*, *desenvolvimento profissional docente*, *teacher professional development*, *continuing teacher education*, *teacher learning*, *reflective practice*, and *teacher education*. Official documents were also analyzed, including the National Education Guidelines and Framework Law, Law No. 9,394/1996; the National Common Framework for the Continuing Education of Basic Education Teachers (Brazil, 2020); and UNESCO publications concerning teacher professional development.

The inclusion criteria encompassed studies that directly addressed continuing teacher education, professional development, pedagogical innovation, reflection on practice, collaborative learning, teacher education policies, and improvements in educational quality. Duplicate publications, texts without a scientific foundation, opinion-based materials, and studies unrelated to the research objectives were excluded.

## RESULTS AND DISCUSSION

The literature analysis shows that continuing teacher education is one of the most relevant factors in teacher professional development and in improving the quality of teaching and learning processes. Teachers participating in ongoing professional development programs develop a greater capacity to reflect

critically on their practices, reorganize pedagogical strategies, and respond to the social, technological, and curricular transformations that characterize contemporary education. According to Nóvoa (2022), teacher professional development depends on constructing ongoing processes of learning, reflection, and collaboration that move beyond professional development models centered solely on content transmission.

The strengthening of reflective practice emerged as a recurring outcome. Teachers who systematically analyze their work, investigate the results of pedagogical interventions, and share experiences with other professionals demonstrate a greater capacity to innovate and promote meaningful learning. Critical reflection makes it possible to identify difficulties, reinterpret situations experienced in the classroom, and construct alternatives suited to students' needs. Schön (2000) emphasizes that reflective professionals develop greater competence in addressing complex and unpredictable situations by transforming their own experience into an ongoing source of learning.

Continuing teacher education programs grounded in collaborative learning produce more consistent results than isolated professional development activities. Learning communities, study groups, action research, peer observation, and institutional projects promote the exchange of experiences, the collective construction of knowledge, and the strengthening of a collaborative culture in schools. Fullan (2020) states that collaborative environments significantly expand educational institutions' capacity to promote innovation, strengthen teachers' professional identity, and improve the quality of student learning.

The contribution of continuing teacher education to pedagogical innovation is another dimension identified in the literature. The incorporation of active methodologies, digital technologies, inclusive practices, formative assessment, and blended learning depends directly on teachers' ongoing professional learning and the development of professional competencies suited to the demands of contemporary education. Imbernón (2023) emphasizes that contextualized professional development processes foster

effective changes in pedagogical practices by stimulating inquiry, creativity, autonomy, and adaptability in response to educational transformations.

Continuing teacher education strengthens inclusive education by preparing teachers to address classroom diversity. Studies show that programs focused on developing inclusive practices expand teachers' capacity to plan accessible activities, adapt teaching strategies, and use diversified pedagogical resources. The National Common Framework for the Continuing Education of Basic Education Teachers (Brazil, 2020) reinforces the principle that professional development must encompass competencies related to inclusion, equity, and respect for diversity, thereby promoting pedagogical practices committed to the learning of all students.

Despite the contributions identified, the bibliographic research indicates major challenges to consolidating continuing teacher education. These include excessive teacher workloads, limited time allocated for study, discontinuities in public policies, insufficient investment, and programs that are poorly aligned with schools' concrete needs. Gatti (2021) emphasizes that professional development policies produce more significant impacts when implemented continuously, contextually, and in an integrated manner within the daily activities of schools, thereby fostering effective changes in pedagogical practices.

To systematize the principal findings of the review, Table 1 presents the categories that recurred most frequently in the studies analyzed, relating each dimension to the contributions identified and the authors who provide the foundation for the discussion.

Table 1

Summary of the principal findings on continuing teacher education

| Category of analysis             | Summary of results                                                                                                                                                                                       | Reference authors |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Ongoing professional development | Continuing teacher education accompanies teachers throughout their careers, expands their professional knowledge, and enables more effective responses to social, curricular, and technological changes. | Nóvoa (2022)      |
| Reflective practice              | Systematically analyzing one’s own work makes it possible to identify difficulties, evaluate interventions, and reorganize pedagogical strategies based on students’ needs.                              | Schön (2000)      |
| Collaborative learning           | Learning communities, study groups, action research, and peer observation strengthen the exchange of experiences and the collective construction of knowledge.                                           | Fullan (2020)     |
| Pedagogical innovation           | Professional updating fosters the contextualized adoption of active methodologies, digital technologies, formative assessment, and blended learning.                                                     | Imbernón (2023)   |
| Inclusive education              | Professional development expands teachers’ capacity to plan accessible activities, adapt strategies, and use diverse resources to address classroom heterogeneity.                                       | Brasil (2020)     |
| Implementation challenges        | Excessive workloads, lack of time, policy discontinuities, insufficient investment, and initiatives disconnected from school realities reduce program effectiveness.                                     | Gatti (2021)      |

Source: Prepared by the authors (2026), based on the studies analyzed.

The organization of the categories in Table 1 demonstrates that the effects of continuing teacher education extend beyond content updating. Its outcomes encompass dimensions related to reflection on practice, professional collaboration, pedagogical innovation, and educational inclusion. At the same time, the challenges identified indicate that the quality of professional development initiatives depends on continuity, contextualization, suitable working conditions, and alignment with schools’ concrete needs.

A critical analysis of the evidence demonstrates that continuing teacher education is a strategic process for strengthening teacher professionalism, promoting pedagogical innovation, and improving educational quality. Its effectiveness, however, depends on integrating consistent public policies, recognition of the teaching career, suitable working conditions, a collaborative institutional culture, and professional development programs committed to inquiry into practice and ongoing professional growth.

### CONCLUSION

This study demonstrated that continuing teacher education is essential to teachers' professional development and the transformation of pedagogical practices. The literature analysis showed that ongoing professional learning strengthens teacher autonomy, expands scientific knowledge, fosters critical reflection on practice, and contributes to implementing innovative methodologies suited to the demands of contemporary education.

The studies analyzed demonstrated that continuing teacher education programs grounded in collaboration, inquiry into practice, peer learning, and pedagogical investigation have greater potential to produce effective changes in teachers' work. The findings also showed that ongoing professional development promotes the incorporation of inclusive practices, digital technologies, active methodologies, and more formative assessment processes, thereby helping improve the quality of teaching and learning.

The research also demonstrated that teacher professional development depends on coordination among public policies, recognition of the teaching career, suitable working conditions, and the strengthening of an institutional culture focused on ongoing learning. Continuing teacher education should not be understood as an isolated activity, but as a structural component of educational policies and teacher professionalization.

Nevertheless, challenges remain concerning discontinuities in professional development programs, insufficient resources, excessive workloads, and the need for greater integration among universities, education systems, and schools. Overcoming these obstacles requires continuous investment in recognizing and supporting teachers and in constructing contextualized, collaborative professional development programs aligned with the actual needs of pedagogical practice.

It is therefore concluded that continuing teacher education is indispensable to strengthening teachers' professional identity, promoting educational innovation, and transforming teaching practice. By fostering critical reflection, collaborative learning, and ongoing knowledge development, it contributes to

building a more democratic, inclusive, and innovative education committed to students' holistic development. Future research should empirically investigate the effects of different continuing teacher education models on pedagogical practice and learning outcomes in basic education.

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