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# "Innovation in the Classroom: The Importance of Continuous Teacher Training". A Systematic Literature Review

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#### Abstract

Teacher training is a widely discussed topic in educational literature, addressing both initial preparation and the ongoing professional development of educators. Key criteria for distinguishing a comprehensive teacher include their pedagogical approach, the theory-practice relationship, and the necessary competencies that set them apart. This scientific article aims to systematically analyze the literature of various studies related to teacher training, its importance in classroom practices, and professional development, contributing significantly to the state of the art. The methodology employed is qualitative and documentary, involving an in-depth review of documents that highlight the importance of teacher training for the effective development of classroom practices.

**Keywords:** Teacher Training, Professional Development, Competencies, Innovation.

#### **INTRODUCTION**

Teacher training is a fundamental element in the educational process, not only for its direct impact on teaching quality but also for its influence on the personal and professional growth of educators. In recent years, the increasing complexity of educational demands has led to a renewed focus on continuous and specialized teacher training, encompassing not only the acquisition of academic knowledge but also the development of digital, emotional, and social competencies.

According to UNESCO (2015), teacher training must adapt to new global realities, such as global citizenship and intercultural competencies, enabling educators to shape students with a broader worldview. On a practical level, mentorship and ongoing professional support have been identified as key strategies to strengthen teacher resilience, especially in high-pressure contexts. Similarly, it emphasizes the importance of continuous teacher training to prepare students for a globalized and interconnected society, highlighting the fundamental role of teachers and the power of their voice in promoting basic values for healthy societal coexistence.

The effective implementation of innovation in classrooms fundamentally depends on the willingness of teachers to undergo training and professional development. Teachers are the main drivers of change and transformation in educational settings and models, which is why it is essential for them to prepare in the use of new technologies, teaching methods, and pedagogical approaches relevant to their practices and the needs of their environment. In this regard, Imbernón (2007) argues that teacher training is crucial for addressing the pedagogical and technological challenges of the 21st century. This training should not only focus on the acquisition of knowledge but also include the development of skills and competencies that enable teachers to make good use of technological tools and the exploration and implementation of meaningful experiences in their pedagogical practices, allowing them to reflect on their classroom performance.

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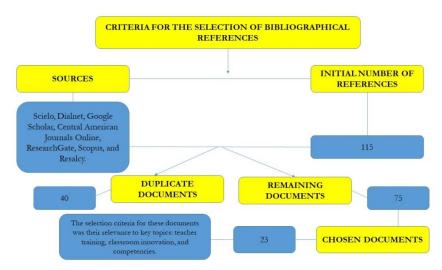
On the other hand, educational innovation has promoted new teaching methodologies, such as the use of technological tools that foster more dynamic and effective learning. This not only improves teaching quality but also enables teachers to develop the skills necessary for their professional growth in an increasingly digitalized educational environment. Educational innovation also seeks to adapt education to all the needs and challenges that arise, preparing students to live in this ever-changing world. However, educators must be open to navigating and adapting to new forms of teaching, while educational institutions must foster environments for experimentation and creativity.

In summary, teacher training is not only essential for students' academic success but also has a profound impact on the personal and professional evolution of educators, underscoring the need for comprehensive and continuous approaches to their preparation.

### **METHODS**

This research is based on a qualitative documentary approach, grounded in a broad theoretical framework. The applied methodology focuses on a thorough analysis of documents and articles that explore the importance of continuous teacher training in classroom practices. A detailed literature review was conducted across renowned scientific databases and doctoral theses, including Scielo, Dialnet, Google Scholar, Central American Journals Online, ResearchGate, Scopus, and Resalcy. The search terms used include concepts such as teacher training, classroom innovation, and continuous professional development.

The review covered both international and national sources, including primary studies and research published since 2012. The data obtained were rigorously organized to provide a clear description of classroom innovation and the importance of continuous teacher training. From this process, 115 initial references were identified, of which 23 studies met the previously established inclusion criteria.



Reference Selection Table. Source: Own elaboration.

#### LITERATURE REVIEW

## **Teacher Training**

Teacher training refers to the systematic process that enables teachers to acquire, develop, and update the competencies, knowledge, and skills necessary to improve their performance and effectiveness in the classroom. This process encompasses both initial training, which prepares individuals to become professionals, and continuous training, which they receive throughout their careers. The main goal of teacher training is to transform classroom practices, thereby improving the quality of teaching, fostering pedagogical innovation, and adapting teachers to changes in educational needs, new technologies, and social contexts.

Shulman (1987) introduced the concept of "pedagogical content knowledge" (PCK), which is based on the technical knowledge that teachers have regarding the teaching of a specific subject. According to the author, teachers need both mastery of the core content and the ability to effectively convey that content. Therefore, teachers must engage in continuous training, given the evolving demands of the world. Teachers are not only required to have a deep understanding of the subjects they teach but also to know how to teach that content effectively. This involves integrating the necessary tools into pedagogical practices to communicate knowledge while considering students' needs.

González and Peña (2020) argue that teacher training is not solely about how knowledge is transmitted but also opens pathways for significant change in pedagogical attitudes and practices, aiming to address current educational needs such as inclusion, innovation, and digitalization. The authors also emphasize that training must be flexible, continuous, and adaptive to be effective. By this, they mean that training should be aligned with the needs of the community in which teachers work, ensuring that it has relevance to their pedagogical practices. Likewise, they argue that updates must be continuous, as education is constantly changing, making it essential for teachers to stay at the forefront of the demands of the modern world.

According to Vásquez et al. (2024), teacher training is linked to the individual and their relationship with their context, analyzing the uniqueness of each teacher, the importance of the self, the teacher's intrinsic motivation regarding training, and its relevance to the community in which they work. The authors emphasize that teacher training leads to excellence, from the individual to the collective level, as a teacher who pursues training achieves personal excellence, which in turn translates to educational excellence. A motivated teacher brings a significant experience to their classroom practices.

Vaillant (2016) argues that teacher training must be continuous and contextualized so that teachers can adapt to the changes and challenges posed by education and a globalized world, highlighting the need for training in the use and mastery of educational technological tools. Furthermore, he suggests that the quality of initial or undergraduate training is insufficient to meet these challenges. Thus, he proposes that teachers must engage in ongoing training to improve their pedagogical practices.

Delgado (2019) examines the concept of teacher training and defines it as a cultural and social process that promotes the transformation of pedagogical practices. The author argues that teacher training involves multiple social actors, including teachers, students, and administrators, who contribute directly to social change and the development of teachers' capacities and skills. Teachers need knowledge and expertise to adapt to the realities of different contexts.

The author emphasizes the importance of the ongoing professional development of teachers, who should focus on improving their competencies, skills, and pedagogical strategies to contribute to the enhancement of educational quality. Therefore, he argues that continuous teacher training is not only aligned with the acquisition of specific knowledge but also enables teachers to face the constant changes in society and the demands of modern education. In this way, he highlights the need for teacher training with a critical, reflective, and practical approach that includes both technical competencies and the skills necessary for the development of their practices.

#### The Importance of Initial Teacher Training

Initial teacher training is a fundamental process for preparing future teachers with the skills, knowledge, and attitudes necessary to face teaching in diverse and complex contexts. This stage in the education professional's training provides solid theoretical and technical foundations in pedagogy, as well as various teaching strategies and methods, which will allow them to accumulate knowledge for their future performance in pedagogical practices.

The importance of initial training is based on the acquisition of the foundations for high-quality professional development. This article supports various positions from research that has highlighted this importance, determining that teachers who consolidate their foundations during undergraduate education are more effective in their educational work, promote meaningful learning in their students, and contribute to improving academic

results. Learning opportunities in pedagogical practice, such as teaching simulations and field experiences, allow future teachers to gradually and safely face the challenges of the real classroom.

Páez-Herrera et al. (2021) argue that teacher training has become increasingly relevant in recent years as it has had a direct impact on improving educational quality. In their article, they highlight the importance of initial teacher training, as it is crucial for the development of future professionals in pedagogical practices. They note that within initial training, it is essential to include significant aspects such as teaching competence and academic responsibility in curriculum planning, considering that future professionals, who will be responsible for shaping human beings, must remember that in order to transform society, they must constantly prepare themselves.

Berrocoso (2015), in his article "Initial Teacher Training in the Primary Education Degree: A Qualitative Assessment of the Design and Curriculum Development of the Subject Educational and Research Technological Resources," analyzes the design and curriculum development of the subject 'Educational and Research Technological Resources,' contextualized within the initial training of primary education teachers through qualitative research. He reveals how the development of this subject influences the preparation of future teachers who, through the use of technological and educational tools, could have a meaningful experience in their classroom practices. Among the objectives of the subject, it aims to familiarize students with technological tools while also promoting a critical stance on their use in pedagogical practices. In the results of his research, Berrocoso highlights that, although future teachers positively value the presence of technological resources in the classroom, they also believe that they must continue their training and continuous improvement in the effective use of these tools, taking into account the real contexts of the teaching-learning process. Finally, the author emphasizes the importance of adjusting curricula to consider the challenges of contemporary education.

Matsumoto-Royo, K., and Conget, P. (2024) argue how pedagogical experiences on campus contribute to the professional training of future teachers. In their research, they focus on the planning, execution, and outcomes of learning opportunities in pedagogical practice in teacher training programs at three educational levels: early childhood, elementary, and secondary education. The authors argue that teaching simulations are activities that prevail in initial education and allow students to apply knowledge, learn from mistakes, exercise self-assessment, and approach the complexities of teaching. Therefore, they assert that learning opportunities must be integrated into the training of future teachers so that teachers-in-training can improve their understanding of these opportunities and achieve successful execution in pedagogical practices.

The emphasis on reflective learning and self-assessment during initial training helps future teachers identify their areas for improvement, thereby strengthening their self-confidence and teaching competence. Initial teacher training is crucial for ensuring educational quality and success in the pedagogical practices of future teachers. Therefore, they must be assured of preparation that is based both on knowledge and strategies that allow them to discover their skills and apply them to the context they will face—the realities of educational environments, particularly in current contexts where classroom practices must be accompanied by innovation and technology.

### **Continuous Professional Development**

Continuous professional development refers to the process of lifelong learning and ongoing professional development that individuals pursue throughout their careers in order to acquire new knowledge and stay updated with the demands of the times and their context. It is an essential process that ensures educators remain updated, motivated, and prepared to face the challenges of a constantly changing world through a series of activities and strategies designed to enhance their professional skills. Ongoing development allows professionals to stay current with the latest pedagogical, technological, and curricular trends, improving their teaching practices, increasing motivation, and reinforcing their commitment to their work. Nowadays, continuous professional development is focused on the use and adaptation of new technologies and methodologies, which allow professionals to keep pace with change, as required by the demands of the globalized world.

Eraut (2004) defines continuous professional development as the learning process that occurs after initial or formal education. He initially relates it to the knowledge acquired through experience in a workplace context.

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According to Eraut, continuous development is essential in professional practice, as it is the acquired experience that enables individuals to face the challenges of a constantly changing world. Therefore, teachers must stay updated on both practice and theory within the educational context.

Marcelo (2009) argues that continuous professional development is a comprehensive process that goes beyond attending courses in formal settings. The author claims that continuous development is also linked to the learning gained in the workplace, through collaborative work among colleagues, and through regular participation in learning communities.

Flores et al. (2021) state that continuous development should focus on pedagogical competencies and technological updates to improve educational quality. The authors argue that there are several challenges to address, such as the lack of fundamental tools in the classroom, the need to manage new technologies, and the promotion of ideal spaces and environments for effective pedagogical practices. Therefore, they propose tackling these challenges to create an environment and culture of quality education where inclusion and teacher development are prioritized.

Ochoa and Balderas (2021), in their article, study the interrelationships and different concepts related to continuing education, lifelong education, and lifelong learning. They analyze how these terms, though often used interchangeably, have key distinctions that are fundamental to understanding education in today's world. In their research, they approach the concept of each term. They define continuing education as the training offered to professionals to update and strengthen their skills. Lifelong education is explained as learning that occurs throughout life, encompassing formal, informal, and non-formal education. Lastly, lifelong learning is presented as education that integrates the acquisition of knowledge and skills at any time and place, considering the context. For the authors, the aforementioned concepts are essential for teachers to adapt to the education system in a constantly changing world. They advocate for the integration of these ideas, emphasizing the importance of promoting a culture of continuous learning focused on the needs of the community to which one belongs.

In line with the views of the aforementioned authors, continuous professional development is a dynamic process that is fundamental for teachers to stay continuously updated and able to adapt to the constant changes of the modern world. It allows their teaching practices to meet the individual and collective needs of students, promoting more personalized and meaningful learning experiences.

#### Innovation in the Classroom

Innovation in the classroom is an approach that aims to transform reality and improve the development of pedagogical practices through the inclusion of new methodologies and technological tools that help create motivating learning environments. In addition, classroom innovation promotes the development of students' critical thinking by providing them with opportunities to express and argue their ideas, placing them at the center of the teaching-learning process.

Chavarría-Giler et al. (2024) highlight the importance of transforming traditional classroom practices, considering the digital era in which we live. In their research, they propose a flipped classroom model as a response to the challenges faced in education. This approach emphasizes the need to promote interactive and autonomous learning, focused on problem-solving. The authors stress how the flipped classroom aligns with the new educational demands, prioritizing the development of critical and collaborative competencies.

In their study, they analyzed the impact of the flipped classroom on the learning process, comparing the results of this methodology with those of the traditional method. They also identified students' perceptions of their own learning and their active participation within the pedagogical model. Based on their findings, the authors conclude that the use of the flipped classroom has a positive effect on students' academic performance, particularly in terms of deep content understanding and the development of critical skills. Similarly, they argue that for the methodology to be successful, it is crucial to train teachers and adapt content and activities to the specific needs of students.

Zavala-Guirado et al. (2020), in their article "Educational Innovation Model According to the Experiences of University Teachers and Students," study innovative practices in university teaching in Sonora, Mexico. They highlight that constructivism and the socio-educational approach contribute to guiding teachers' pedagogical strategies, leading them to work from a humanistic perspective to promote respect, empathy, and trust among students. They argue that for the development of pedagogical practices using this approach, the use of technological tools and interactive platforms is essential, as they help facilitate processes and implement dynamic and active strategies that are fundamental to motivating students and promoting real-time problemsolving. Furthermore, classroom practices with a socio-educational approach prioritize the formation of individuals with practical and ethical skills, enabling them to navigate complex contexts. Therefore, innovation in pedagogical practices with this approach helps promote meaningful learning and develop practical competencies in students, including the effective use of ICTs to create more dynamic and accessible learning environments. Additionally, it encourages student motivation for autonomous learning and the practice of collaborative learning in both physical and digital contexts.

On the other hand, Segovia (2021), in his article "Educational Innovation and Sustainability in the Classroom," analyzes the intrinsic relationship between educational innovation and sustainability, emphasizing teachers' ability to sustainably integrate the development of their practices with the innovative methodologies demanded by today's world. In his research, Segovia highlights the importance of educating students in a comprehensive manner. He argues that teachers should not limit themselves to teaching content but should accompany their practices with value-based education and skills that guide students toward sustainable development, shaping them into individuals who can contribute meaningfully to society.

Technology has played a fundamental role in the teaching-learning processes of the 21st century and has contributed to transforming educational contexts by creating interactive, personalized classrooms focused on inclusive education that considers different learning styles and the specific needs of each student. Among the most common methods are gamification in the classroom and the use of digital platforms, which have had a positive impact on student motivation by allowing them to learn at their own pace.

## Challenges in Teacher Training

Challenges in teacher training require a holistic approach that focuses not only on academic and pedagogical aspects but also on the development of social-emotional skills, empathy, resilience, and adaptability. It is essential for teacher training programs to stay updated and responsive to the current demands of education by focusing on constant upskilling, technology integration, classroom diversity, growth mindset, collaboration, teamwork, and addressing student diversity. The challenges in the professional growth process for educators are diverse and complex. Below are some specific challenges, emphasizing the importance of addressing them to ensure teachers are well-prepared for their pedagogical work:

Lack of Training and Support: Training and support are essential for educators to innovate in educational practices, requiring opportunities to develop skills and knowledge in areas such as educational technology, learning design, and assessment. Monsalve and Gallardo (2018) argue that inadequate institutional support and resource limitations in classroom environments can hinder teacher motivation, limiting the use of transformative methodologies. Their study concludes that establishing support networks during teacher training promotes the exchange of experiences, knowledge, and resources, overcoming obstacles that impair effective teacher development.

Resistance to Change: Educational innovation often necessitates a shift in teaching and learning methods. However, some teachers may resist change due to a lack of confidence in their skills or a belief that traditional methods are more effective. Huberman (1992) explores how teachers approach change at various stages of their careers, suggesting that experienced educators may be more resistant to innovation, adhering to traditional methods they perceive as foundational, while viewing changes as temporary.

Lack of Resources and Time: Schools and educational systems often lack the resources needed to implement educational innovations, including technology, materials, and administrative support. Teachers, who frequently have busy schedules, may not have the time necessary to develop and implement new methods. A study by the National Commission for the Continuous Improvement of Education (Mejoredu, 2022) in Mexico emphasizes that one of the main challenges in teacher training is the lack of sufficient technological and material resources for ongoing training. Additionally, it notes that educators face high workloads that prevent them from participating in continuing education.

Evaluation and Monitoring: Teacher training should include continuous monitoring and evaluation to ensure that educators develop the skills and knowledge needed to effectively implement educational innovations. According to Escudero (2020), the evaluation of teacher training should focus on reflective professional practice. He argues for assessment systems that go beyond technical aspects to address the development of pedagogical competencies and classroom impact.

Rinke and Mawhinney (2019), in Opportunities and Challenges in Teacher Hiring and Retention, analyze the challenges faced by educators throughout their professional lives. They emphasize the importance of valuing and respecting teachers' lives and work, demonstrating that teacher hiring and retention are complex, multifaceted issues that require more than simplistic policy changes.

Fullan (2016) advocates for educational leaders to adopt "new leadership for change," which involves a multidirectional approach to actions, agreements, and responsibilities across educational system levels. He posits that such coordination provides the necessary energy for a more rapid and effective shift toward school system improvement. This new leadership promotes deep learning rooted in real-world actions, greatly supported and accelerated by digital technology innovations.

Saltos-Rivas et al. (2023) assert that continuous training fosters self-directed learning and professional development among teachers, examining educators' growing interest in developing digital competencies to meet modern societal challenges. Their research highlights a significant increase in academic production around digital skills and the use of technological tools within teaching practices, demonstrating their importance for teachers' performance. They also note deficiencies in organizing digital pedagogical materials in higher education settings, recommending specific training in this area.

Finally, Vaillant (2016) discusses that challenges in teacher training include improving working conditions, initial and continuous training quality, and professional capacity through proper evaluation. He emphasizes how teachers' working conditions, initial training processes, and ongoing development directly influence classroom performance and best practices, contributing significantly to improving educational quality.

### **CONCLUSION**

Based on the results and discussion regarding the concepts and views on teacher training, it can be concluded that teacher training is a fundamental process impacting both the quality of education and classroom practices. Innovation in the classroom is a dynamic, continuous process that seeks to transform traditional educational practices to meet the demands of an increasingly complex and changing world. As such, it not only enhances educational quality but also transforms the learning experience at all levels. Initial education lays the groundwork for solid pedagogical practice, while continuing education enables teachers to adapt to the changing needs of students and advancements in education. Additionally, classroom innovation fosters a dynamic environment that encourages creativity and critical thinking among students. By integrating these three elements, teaching quality is improved, cultivating a more equitable and relevant future in education and paving the way for a more meaningful, in-depth, and high-quality educational process. Thus, it is essential for educational institutions and policymakers to prioritize and support teacher training in these areas, ensuring educators are equipped to face 21st-century challenges.

The challenges in teacher training are complex and evolving, stemming from the need for ongoing training and professional development in competencies, skills, and pedagogical strategies to address the technological, pedagogical, and social changes of today's world. Among the fundamental challenges in teacher training are resistance to change, lack of resources, and infrastructure or environmental barriers that hinder effective classroom practices. Both initial and continuous training models should focus on developing practical, collaborative, and adaptive competencies closely linked to real educational contexts rather than solely on

knowledge acquisition. Training should be integrated to meet the needs of educational communities and the demands of the contemporary world.

In conclusion, to meet the current challenges of teacher training, classroom innovation, and using technological tools in classroom practices, it is essential to establish educational policies that promote motivation for teacher training and ongoing professional development. Additionally, fostering a culture of innovation and support for teachers is crucial, focusing on training with active, dynamic, and up-to-date learning methods integrated with the use and mastery of technological tools. This will allow teachers to adapt and become facilitators of knowledge through engaging classroom environments, thereby contributing to the improvement of educational quality in the contexts they serve.

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