



ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

IJDR

International Journal of Development Research
Vol. 14, Issue, 09, pp. 66546-66549, September, 2024
<https://doi.org/10.37118/ijdr.28655.09.2024>



REVIEW ARTICLE

OPEN ACCESS

HOW TO TRAIN TEACHERS PREPARED TO USE DIGITAL TECHNOLOGIES THAT INFLUENCE THE SOCIAL MOVEMENTS OF CHILDREN AT SCHOOL: A SYSTEMATIC REVIEW

¹Silvania Maria da Silva Santos and ²Islane Cristina Martins

¹Postgraduate in Psychopedagogy – UPE; ²PhD Federal University from Pernambuco

ARTICLE INFO

Article History:

Received 11th June, 2024
Received in revised form
29th July, 2024
Accepted 19th August, 2024
Published online 30th September, 2024

Key Words:

Teacher training. Digital technologies. Social movements. Early childhood Education.

*Corresponding Author:
Silvania Maria da Silva Santos

ABSTRACT

Introduction: Teacher training is a central element in the development of quality education. This training involves not only the acquisition of pedagogical knowledge, but also the development of skills that allow educators to adapt to new demands and challenges. The general objective of the study was to critically analyze teacher training for the use of digital technologies that influence children's social movements at school. **Methodology:** A systematic literature review was carried out in January 2024, using the ERIC, LILACS, Periódicos CAPES, Science Direct, SciELO, SCOPUS and Google Scholar databases. **Results and Discussion:** The challenges for teacher training in this context are significant. Many teachers still face barriers such as the lack of adequate infrastructure, resistance to change and insecurity regarding the use of technologies in the classroom. These obstacles can compromise the effectiveness of the integration of digital technologies in the school environment and, consequently, limit the development of students' social and digital skills. **Conclusion:** In short, the strategies identified in the literature show that, when integrated effectively, digital technologies have the potential to enrich the educational environment and facilitate children's participation in social movements at school.

Copyright©2024, Silvania Maria da Silva Santos and Islane Cristina Martins. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Silvania Maria da Silva Santos and Islane Cristina Martins 2024. "How to train teachers prepared to use digital technologies that influence the Social Movements of Children at School: A Systematic Review". *International Journal of Development Research*, 14, (09), 66546-66549.

INTRODUCTION

Teacher training is a central element in the development of quality education. This training involves not only the acquisition of pedagogical knowledge, but also the development of skills that allow educators to adapt to new demands and challenges. In the current context, this adaptation includes the ability to integrate digital technologies into educational practice, aiming to promote a more dynamic and interactive learning environment (Aureliano; Queiroz, 2023). With regard to interactive learning, digital technologies refer to a set of tools and systems that use information technology to process, store and communicate information. In addition to physical devices, they include online platforms, such as social networks, virtual learning environments and educational management systems, which allow interaction and sharing of information quickly and efficiently (Máximo, 2024). Like this, Digital technologies have become increasingly influential in education, transforming the way knowledge is transmitted and acquired, including tools from learning platforms to interactive applications that facilitate student engagement. For teachers to be able to use these technologies effectively, it is essential that they receive adequate training, which enables them to explore the full potential of these tools in the classroom (Schuartz; Sarmiento, 2020).

Therefore, Children's social movements at school are profoundly impacted by the use of these digital technologies. Today's children are constantly immersed in digital environments, which influences their interactions, behaviors and ways of learning. Therefore, understanding how these social dynamics develop is crucial so that teachers can create pedagogical strategies that make positive use of these interactions, promoting an inclusive and collaborative school environment (Coimbra, 2020). Even so, It is essential to consider the role of early childhood education in this context, which is a critical phase in children's development, where the foundations for future learning are established. At this stage, the careful and balanced introduction of digital technologies can enrich the educational process, but this requires well-prepared teachers to mediate these experiences in a way that favors children's social and cognitive development (Schuchter; Lomba, 2022). The justification for this study is based on the growing importance of digital technologies in the educational context and the urgent need to prepare teachers to deal with these tools effectively. However, many teachers still face significant challenges in integrating these technologies into their pedagogical practices, whether due to a lack of adequate training or difficulties in adapting their methodologies to new realities. The study's general objective is to critically analyze teacher training for the use of digital technologies that influence children's social movements at school, through a systematic review of the literature, with the aim of identifying the main strategies and challenges involved in this process. Educational.

MATERIAL AND METHODS

The search terms used in this systematic review were obtained through consultation of the Health Sciences Descriptors. A literature survey was carried out in January 2024, in the bibliographic research the ERIC, LILACS, Periódicos CAPES, Science Direct, SciELO, SCOPUS and Google Scholar databases were used. The combination of descriptors was used in the search for works: "Early childhood education", "Teacher training", "Social movements" and "Digital technologies". In this way, 07 articles were selected and included according to the eligibility criteria as shown in Figure 1. The inclusion criteria were: scientific articles in English, Spanish and Portuguese, in the last five years, on the topic of how to train teachers prepared for use of digital technologies that influence children's social movements at school. Book chapters, event summaries, case reports, editorials, systematic reviews, meta-analyses and opinion articles were also excluded.

technologies in education involves the creation of pedagogical methodologies that take into account the complexities of social interactions mediated by these technologies. Therefore, training teachers for this reality requires a holistic approach, which encompasses pedagogical, social and technological aspects (Schuartz; Sarmiento, 2020). In turn, the incorporation of digital technologies into the school environment also raises questions about ethics and digital security. As children become increasingly involved with these technologies, it is essential that teachers are prepared to guide students on the responsible and safe use of these tools. Teacher training, therefore, must cover not only technical skills, but also the knowledge and practices necessary to promote a culture of digital security and ethics among students (Schuchter; Lomba, 2022). Another crucial aspect is the role of public policies in promoting teacher training that is effective and inclusive. It is worth highlighting that educational institutions need to develop and implement policies that guarantee access to continuous, quality training for all teachers, regardless of where they work.

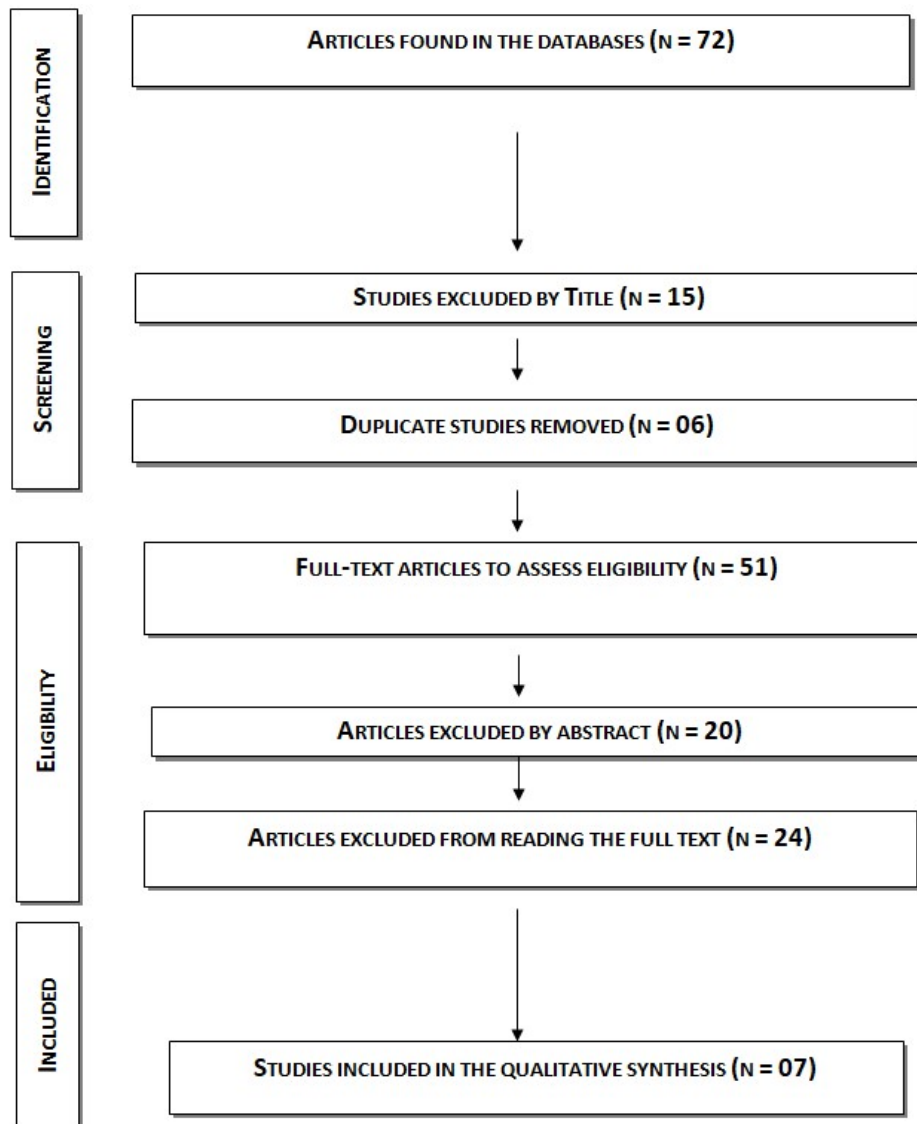


Figure 1. Flowchart and Selection and Inclusion Criteria for Work

RESULTS AND DISCUSSION

Teacher training for the use of digital technologies must consider the particularities of the different stages of child development to understand the influence on children's social movements at school. In early childhood education, for example, the use of technologies must be carefully mediated to ensure that digital experiences complement, rather than replace, the social interactions and active learning that are essential at this stage (Máximo, 2024). Furthermore, the use of digital

This includes investments in infrastructure, development of specific curricula for training in digital technologies and incentives for educators to actively participate in these training processes (Leal; Amorim, Lopes, 2023). However, the challenges for teacher training in this context are significant. Many teachers still face barriers such as the lack of adequate infrastructure, resistance to change and insecurity regarding the use of technologies in the classroom. These obstacles can compromise the effectiveness of the integration of digital technologies in the school environment and, consequently, limit the development of students' social and digital skills.

Table 1. Statement of articles that form the Systematic Review

#N	YEAR	Title	Authors	Periodical	Objectives	Results
1	2018	Teacher training: limits and challenges in higher education	Antonio Germano Magalhães Júnior; Monica Duarte Cavaignaci	Research Notebook	Carry out a reflection on the results of a research financed from a public notice, with the purpose of mapping the training, practices and knowledge of teachers in undergraduate courses from a public state university	There are deficiencies and insufficiencies in the pedagogical training of teachers in IES undergraduate courses, which end up taking on much more characteristics of bachelor's degrees, aimed at preparing professionals from different areas of knowledge for research and work in the job market, than courses specifically aimed at teaching how to teach, thus pointing out limits and challenges for the training of teachers who train teachers.
2	2022	Teaching, profession and teacher training for basic education: reflections and theoretical references	Lúcia Helena Schuchter, Maria Lúcia de Resende Lomba	Preprints	Present, from a historical and reflective perspective, concepts and theoretical references about teaching and teacher training	The study highlights the need for engagement and awareness on the part of teachers in their training paths and in the exercise of their profession, in terms of thinking about strategies and possibilities for training problems and the new challenges imposed on education that permeate society, the school life and professional training.
3	2020	Digital information and communication technologies (TDIC) and teaching process	Antonio Sandro Schuartz; Helder Boska de Moraes Sarmento	Rev. katalysis	Discover the objectives with which such resources are being used in the training of future social workers, positioning them in relation to the certification levels of pedagogical skills in TDIC.	The digital context requires a teacher who is not only a transmitter of knowledge, but also a provocateur in a society that has demanded critical, competent, creative and flexible subjects. In this scenario, hardened and rigid pedagogical practices must be made more flexible and added to them with others that place students as producers of knowledge. The teacher becomes the mediating agent in this process.
4	2023	Digital technologies as pedagogical resources in remote teaching: implications for continuing education and teaching practices	Francisca Edilma Braga Soares Aureliano; Damiana Eulinia de Queiroz	Education in Magazine	Analyze the implications of the use of digital technologies in the continuing education process and in the practices of literacy teachers, during remote teaching, in 2020, at Escola Municipal Francisco Francelino de Moura	The process of teacher reflection starts from the daily needs and concerns that go beyond the "floor" of the school, therefore, there is a need for the educator to think and rethink the development of their practice and, after carrying it out, replan for the execution of a new action reflected. It can be seen, then, that scientific knowledge alone is insufficient to carry out teaching and learning processes effectively.
5	2023	Technology and education: reflections from an ethnography on experiences with remote teaching during the pandemic	Maria Elisa Maximo	Horizon. anthropol	Analyze the experiences and challenges of remote teaching during the pandemic, specifically in higher education institutions.	Considering the data related to the expansion of distance learning, as well as the reports that indicate the acceleration and precariousness of life beyond social isolation, the research aimed to promote reflection on the insertion of digital technologies in educational practices that does not meet productivist demands and marketing, and that effectively situates pedagogical practices in contemporary languages and ways of existing.
6	2023	Basic Education Teacher Training Models: who do we train?	Camila Lima Coimbra	Education and Reality	Trace the historical path of Basic Education teacher training in Brazil.	Basic education teacher training models play a crucial role in building future generations. The central question "who do we train?" reflects the importance of preparing educators who not only master the pedagogical content, but who are also able to face the social, cultural and emotional challenges of modern classrooms. Training must be holistic, integrating theory and practice, and promote a commitment to inclusion, equity and citizenship.
7	2023	Training of early childhood education teachers: experiences from the teaching specialization course	Fernanda de Lourdes Almeida Leal; Ana Luisa Nogueira de Amorim; Denise Maria de Carvalho Lopes	Cad. Cedes	This article aims to reflect on the network teacher training policy conducted by the General Coordination of Early Childhood Education linked to the Secretariat of Basic Education of the Ministry of Education.	The research highlights how continuous training can positively influence pedagogical practice, providing teachers with theoretical and practical tools that improve their skills and teaching methodologies. Analysis of the experiences reported by participants reveals an increase in confidence and teaching competence, as well as a better understanding of children's needs and potential.

It is crucial, therefore, that teacher training programs are structured in a way that overcomes these barriers, offering ongoing support and sufficient resources to ensure that educators feel confident and empowered to use these tools (Coimbra, 2020). Furthermore, it is necessary to consider that teacher training for the use of digital technologies must be a continuous process, and not limited to short courses or sporadic workshops. Rapid technological evolution requires teachers to be constantly updated, developing new skills and adapting their pedagogical practices as new tools and challenges arise. Therefore, continuous training and professional development must be essential pillars in educational policies aimed at integrating digital technologies in schools, aiming for a better understanding of the digital technologies that influence children's social movements (Aureliano; Queiroz, 2023). On the other hand, the successful integration of digital technologies in education also depends on effective collaboration between different actors in the educational system, including managers, parents and the community in general. This training should therefore be seen as part of a broader effort to create a school culture that values and promotes the critical and responsible use of digital technologies. This includes creating school policies that encourage pedagogical innovation and offering adequate resources and support for teachers (Magalhães; Cavaignac, 2018). Therefore, it is important to highlight that teacher training is considered an important strategy to achieve a more inclusive and equitable education, contributing to better use of technologies for children's social movements at school. These technologies have the potential to expand access to knowledge and promote new forms of learning that meet children's needs and interests in a more comprehensive and personalized way (Schuchter; Lomba, 2022).

CONCLUSION

In short, the strategies identified in the literature show that, when integrated effectively, digital technologies have the potential to enrich the educational environment and facilitate children's participation in social movements. For example, using digital platforms for debates, collaborative projects, and interactive activities can foster a deeper understanding of social and political issues, encouraging active student engagement.

However, teacher training often does not keep pace with technological innovations, resulting in gaps in educators' ability to implement these tools effectively. However, challenges faced in the integration of digital technologies in education include the lack of adequate infrastructure, resistance to change on the part of some educators and inequalities in access to technologies. Furthermore, the absence of a clear pedagogical approach to the use of digital technologies in social movement contexts may limit their transformative potential. To address these issues, it is essential that educational institutions and policymakers invest in more robust and adaptable training programs that prepare teachers to face these challenges.

REFERENCES

- AURELIANO, FEBS; QUEIROZ, DE Digital technologies as pedagogical resources in remote teaching: implications for continuing education and teaching practices. *Education in Magazine*, v. 39, no. 4, p. 1-8, 2023.
- COIMBRA, CL Basic Education Teacher Training Models: who do we train? *Education & Reality*, Porto Alegre, v. 45, no. 1, e91731, 2020;
- LEAL, FLA; AMORIM, ALN; LOPES, DMC Training of early childhood education teachers: experiences from the teaching specialization course. *Cad. Cedes*, Campinas, v. 43, no. 119, p.119-129, Jan.-Apr., 2023.
- MAGALHÃES, AGM; CAVAIGNAC, MD Teacher training: limits and challenges in higher education. *Research notebooks*, v. 48, no. 169, p. 902-920, July/September, 2018.
- MAXIMO, ME Technology and education: reflections from an ethnography on experiences with remote teaching during the pandemic. *Horizon. anthropol., Porto Alegre*, year 30, n. 68, p.1-33, 2024.
- SCHUARTZ, AS; SARMENTO, HBM Digital information and communication technologies (TDIC) and teaching process. *R. Katál.*, Florianópolis, v. 23, no. 3, p. 429-438, 2020.
- SCHUCHTER, LH; LOMBA, MLR Teaching, profession and teacher training for basic education: reflections and theoretical references. *Preprints*, vol. 22, no. 3, p. 1-10, 2022.
