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## DIGITAL LITERACY AND THE URGENCY IN PERMANENT TRAINING FOR EDUCATORS POST PANDEMIC

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**Abstract:** The central objective of this article is to produce theoretical reflections on digital literacy for educators in a post-pandemic context. Qualitative research in education was used as a theoretical methodological procedure. During the investigative process, a bibliographical review was carried out based on studies by Coscarelli, Buzato, Kenski, Levy, Moran, among others, seeking to develop a solid theoretical framework for greater solidity in the studies. The studies were systematized and anchored in the delimited bibliography and allowed the following conclusions to be reached: a) technologies brought new expectations to the demands of social literacy practices; b) there is an urgency to adapt technology in the context of teacher training and pedagogical performance; c) teachers' lack of digital literacy; d) technologies need to be mediated in constant dialogue regarding the need for digital citizenship. This study sought to understand the difficulties involved in integrating technological instruments into pedagogical practice, as well as their effectiveness in teaching and learning. Therefore, it is believed that the analysis of this research opens new perspectives to strengthen the conscious thinking of training that meets the needs of technology-mediated learning in basic education in public schools.

**Keywords:** Technology, digital literacy, training, teachers.

## INTRODUCTION

When the current education scenario is empirically observed, it is clear that the use of digital information and communication technologies does not match the speed of technological advances and changes. In this regard, the research problem projects relevance in the adequacy and integration of these digital technological resources that need to be integrated into teaching, learning and pedagogical practices.

From the investigation carried out, a number of questions emerge to be answered, such as: the need to insert digital technological resources and the lack of development in digital literacy in the post-pandemic period; the lack of teacher knowledge to mediate teaching through digital technologies in pedagogical learning practice; how is the training process going after a time of so much uncertainty such as remote teaching; and, how to give new meaning to teaching and learning supported by digital technologies.

Faced with so many doubts raised, it was decided in this investigation to focus on the following central research question: what are the implications of continuous training in digital literacy in a context of great integration with technological instruments, and what is the legacy that the Covid pandemic -19 left for current pedagogical activities?

Considering the foundations presented, the construction of this article seeks to contribute to an analytical discussion about the development of digital literacy, as well as ongoing training for teaching, mediated by digital information and communication technologies (TDICs) and how this can influence the teacher training processes and therefore student learning.

In this sense, we intend to discuss issues involving theory and pedagogical practices, with the possibility of emerging some expectations of the foundations that aim to support the educator's practice today.

Ultimately, this study is based on the perspective of contributing to the research and analysis of technological education and digital literacy, by enabling educators to reflect on their pedagogical practice mediated by different technological languages, and their role as a mediating agent in digital culture. The issue here is not limited to technological adaptation, but the aim is to develop a critical exploratory analysis of these resources in

pedagogical practice.

To better understand the teaching and learning process mediated by digital technologies in current times, we sought input from theorists who are aware of this issue, developing a bibliographic review based on a qualitative approach, anchored in methodological support regarding the themes offered by authors such as Buzato, Coscarelli, Imbernón, Kenski, Perrenoud and Moran.

It must be added that the theme has to contribute to academic research and to the training processes of educators, as, in the face of constant technological evolution, education cannot be oblivious to the process of this integration to assist in the search for paths that lead to knowledge, and, in this sense, it is believed that ICT must be studied, understood and incorporated pedagogically.

Finally, this study carried out scientific research through CAPES, Scielo and Google Scholar journals covering more than 100 articles, in a consultation carried out between the months of January and May 2023, taking the last 2 years as a time frame. years that preceded the Covid-19 pandemic, using keywords such as: digital literacy and training of educators in the pandemic.

Once the search parameter was delimited, theoretical support was found that contributed to an analytical discussion about critical digital literacy and the training of educators supported by (TDICs).

Of these periodicals, the sample of 10 works that corroborated the indication of the relevance of the study and effective training in digital literacy for educators, in the table below, stood out.

## **DIGITAL LITERACY AND THE EMERGENCY IN TEACHER TRAINING**

Digital literacy can be understood as the individual's ability to respond appropriately to social demands that involve the use of technological resources and writing in the digital environment, Buzato (2009). It is important to highlight that to fully achieve citizenship in contemporary society, the individual must have access to digital tools.

According to Buzato (2009), new digital literacies highlight deep-rooted sociocultural processes, which ends up generating conflicts for the integration of technological training, however, the use of information and communication technologies reveals possibilities for learning innovations such as research and needs to be considered by educators and the educational community.

In Moran's (2012) understanding, technological research allows us to find consolidated information, but the organization of meaning of these researches to meet our needs depends on knowledge of technological capacity, to seek and know how to critically select, which is relevant to the construction of our knowledge.

Thus, Buzato (2009) states that adapting to the technological diversity of digital literacy presupposes a transformation, because through this connection we also produce other information, imbued with meaning.

In this sense, Moran (2012) warns that the focus of learning must be the search for meaningful information, and teachers must integrate themselves with digital literacies to develop research projects using technical and pedagogical knowledge and thus consolidate their autonomy to meet needs. demands of current social practices.

That is why Buzato (2006) asserts that digital literacy acquires substantial complexities with each technological innovation, but at

Job title	Work objectives
Teacher training and technologies: a literature review	“to analyze how teacher training for the use of digital technologies is being rethought in the post-pandemic context.”
Distance literacy in (and post) pandemic	“Rethinking education, in particular basic education, through reflection that involves revisiting the past, critically analyzing the present and then imagining the future.”
Digital literacy in times of pandemic	“Discuss the perspectives and possibilities of inserting digital literacy in this context of the pandemic.”
Impacts of the pandemic on early childhood education: has the pandemic accelerated the need to problematize the digital issue in early childhood education?	“Highlight how digital technological resources and the issue of digital literacy can contribute to the quality of the teaching and learning process in this segment. (Child education)”
Digital technologies in contemporary education: digital literacy in perspective in the 21st century.	“Reflect on the insertion of digital technologies in the school context from the perspective of digital literacy”
Strategies for Digital Inclusion and Literacy and the Pandemic Setback	“Analyze programs and public policies that have been implemented and reflect on the need for innovative strategies for inclusion and digital literacy.”
An interview with professor Carla Coscarelli in times of pandemic	“Reflect on multimedia sources in the reading and learning process. “
What public school teachers say about digital literacy in times of the Covid-19 pandemic	“Study the educational panorama, through the changes caused by the Covid-19 pandemic.”
Pandemic and digital literacy: artisan of continued training	“Present the proposal for technological mediation developed in a Municipal School in the city of Lauro de Freitas- BA, based on the new knowledge learned by the school’s teaching staff and study digital literacy in continuing education.”
Digital literacies: perspectives of higher education teachers in the context of the covid 19 pandemic	“Investigate how teachers are adapting to the daily use of Digital Information Technologies and how teachers are adapting to the daily use of Digital Information Technologies in their literacy processes.”

Table 1: Analysis of digital literacy perspectives in a post-pandemic context.

**Source:** own elaboration on the works analyzed (an emphasis was added in this stretch).

the same time, it progressively contributes new learning possibilities, in multimodal formats to meet the specificities of social situations, and, finally, warns that to use the full potential of technology, it is necessary to appropriate digital literacy, through training in a school context, to socialize discoveries and knowledge in a collaborative action.

Based on this aspect, it is understood that the ongoing training of educators presupposes preparation in active methodologies, as education requires an educator who meets the needs of the teaching process. Therefore, learning needs to be focused on meaningful experience: the student needs to be the agent of learning.

That is why there is an urgency in digital literacy training for educators, as you need to learn to teach, and you only learn through

practice, Moran (2012). Therefore, the teacher needs to reflect on the change so that the change can effectively occur, and must seek to integrate technological practices into pedagogical action.

Furthermore, warns Moran (2012), technologies guide new processes of knowledge construction, as with the increasing use of resources, platforms and media there are new requirements every day to integrate with this new knowledge. In this sense, learning gains more responsibilities and ownership to align itself with the needs of the new imperatives of communication technology, and, therefore, the formation of continuous training in digital literacy needs to be part of the educators’ repertoire to understand the changes constant and progressive technological technologies.

Ultimately, it is undeniable that with the

introduction of communication technologies, a new social scenario was designed, as new sources of collaborative learning emerged and are emerging every day. This way, considering the potential for using technologies in new learning situations, digital literacy gains property by being associated with other ways of learning and dealing with reading and writing, now in digital format.

The new digital literacies have gained notoriety, as they enable reflection on social transformations based on their assimilation, integration and participation, which synthesizes hybrid knowledge, personalized rather than the dissemination of traditional teaching content, so the new hybrid literacies have as participating products and producers, as Buzato (2009) adds.

In this sense, discussing digital literacy in the training of educators in a post-Covid-19 pandemic context is necessary and appears to be quite pertinent, as it is a subject that is part of everyday life today, as technological insertion with the aim of expanding the repertoire of communication and information has significant and unprecedented implications in contemporary times.

The perspective of digital literacy is based here on the studies of Buzato (2007), which characterizes it as a set of social practices that intertwine and change through information and communication technologies, including skills (material and intellectual) for the construction of meanings from multimodal texts in practices, as well as expanding the ability to locate, filter, evaluate, interact and critically evaluate the information made available in the virtual environment, in addition to integrating us with the rules that govern the computer.

In this aspect, studies by Kenski (2012) enable a way of thinking about the teaching and learning process through a problematizing, liberating and autonomous vision in which

educators must perceive the problems of self-education within a social situation, as well as the imperatives that burden them with isolated responsibility for developing the entire teaching process.

Such studies also enable a critical reading of technological integration, as their scope is to awaken awareness that will contribute to the construction of innovative proposals that can reverberate in the formation of collaborative literacies for everyone who is part of the teaching and learning process.

However, this situation changed the way in which educators appropriated digital information and communication technologies (TDICS) in their training processes and, consequently, in their pedagogical work.

## **CONTRIBUTION OF DIGITAL TECHNOLOGIES TO TEACHING AND LEARNING**

Technology can be a great ally in the teaching-learning process, when there is a conception of teaching and mastery of the technique of using technological instruments and teachers can appropriate multiple possibilities of methodological skills to instruct the educational process, highlights Coscarelli (2021).

According to Kenski (2012), the problems with abandoning the use of TDICs in the classroom occur because the people involved in the teaching process do not consider the complexity of the relationship with technology, that is, they do not have mastery of the technique of technological resources, therefore the importance of ongoing training to adapt to digital literacy for the meaningful use of what technology has to offer us.

Coscarelli (2021) states that schools and educators must reflect on the importance of educational technology, because digital skills are a useful tool, and teachers need to familiarize themselves with the basic resources

necessary to use technology, as it has a lot of potential. to contribute to the training process of teachers and students.

Kenski (2012) reflects on training courses for educators who are far from pedagogical practice to meet the social demands of using technologies in today's learning context.

In view of this, school training curricula need to offer solid training that contributes to the intensification of opportunities for urgent technological adaptation, because, as Kenski (2012) asserts, it is knowledge that presupposes the autonomy and emancipation of pedagogical practice.

Reflecting on the considerations of Coscarelli (2021), it is clear that educators and school institutions need to face their role in the construction of knowledge, and in this aspect, we see the importance of adapting technological resources as a means of mediating and bringing knowledge closer to the student.

Digital literacy can support the pedagogical work of educators, as it provides opportunities for learning about the flexibility and personalization of teaching, through new teaching experiences, counting on the mediation of technological resources for each need, as each one has its own specificity, he points out. Kenski (2012).

This way, Coscarelli (2021) advises that education cannot be confined to conventional models, and highlights that if one of the axes of education must be change, and that education must meet the demands of the knowledge society, then it is necessary innovate their knowledge about technological resources and understand their role as a mediator in teaching and learning.

Thus, based on the theoretical dialogue with the authors, the need to construct another perception of learning is highlighted, that meaningful learning today must establish relationships with the digital world, and

highlight that the information is on the screen, and It thus presents itself as an alternative for interaction, choices and participation that is much more capable of developing and increasing meaning and imagination, expanding interactive forms of integrated learning.

Therefore, there is no way to reverse the advancement of knowledge, since technology, as a social achievement, has a permanent nature, which is why training to develop digital competence skills is urgent.

In this aspect, the recognition of a competence does not only focus on solving some problem without a teaching purpose, it therefore relies on the teacher's sagacity in seeking knowledge through methodological contributions necessary to meet the demand for the digital skill necessary to be developed. Therefore, it is necessary to qualify to monitor the development of the teaching-learning process, and this way expand the repertoire of knowledge and experiences to analyze and observe the necessary resource to meet the specificities of the students, points out Kenski (2012).

Therefore, initial and permanent teacher training cannot be isolated from technological innovations in the teaching and learning curriculum, as it must reflect on their adequacy and new possibilities for integrating them into teaching, streamlining learning in a significant way to meet the demands of social practices and enhancing the ability of digital competence, depending on new educational forms.

Furthermore, today's reading and writing practices occur on screen, thus leading to implications for mastery of understanding and assimilation of content. Therefore, the means of learning to learn, how to access readings, and the ways of writing and socializing texts are expanding, and, in this sense, digital literacy contributes to the competent use

of reading, writing and apprehension, in the face of technologies information and communication, attracting other ways of building, organizing and disseminating knowledge, as Buzato (2006) points out.

TDICS expand the repertoire of understanding and mastery of readers in media environments, reverberate ways of learning to learn, such as critical access to readings, and ways of writing and socializing texts, but requires readers and producers with a background in technical mastery, more capable and interactive in collaborative contexts of digital media, that is, technologies demand other reading and writing skills and competencies.

In this sense, thinking about digital literacy presupposes using different practices mediated in the virtual environment and different devices, to provide an interaction for the exchange of knowledge, and, in this context, the mediation from the educator to the student is consistent with an action of reciprocity and learning possibilities, since that there is so much thought and discussion about literacy, but there is still no talk about the growing need for digital literacy.

From this vision, the possibilities of technological training related to teacher training are renewed, which is why Buzato (2016) emphasizes that in the same way that language is practiced, technology must be practiced, to integrate it into methodological activities of teaching and learning.

However, the integration of digital literacy associated with reading and writing practices must overcome the structuring of old practices and enable the construction of new social demands for knowledge. For this to happen, teacher training must enable the understanding of the specific purpose of technological resources, in this sense Kenski (2012) states that each technology has its specificity and needs to be understood as an

appropriate component in the educational process.

In this regard, the teacher must seek knowledge so that they can structure their pedagogical work with technology that meets their needs and contributes to their training. This way, it can be seen that technology depends on human action, to know and appropriate the instrument, so that it is useful in the teaching stages.

In this sense, warns Coscarelli (2020), that training courses for educators must encourage them for each necessary stage of digital literacy fundamental to the practice of pedagogical skills, and must base spaces for other reading and writing training, therefore, to form As literacy agents, it is necessary to understand the new ways of reading and writing, to adequately respond to the demands of social practices required by the knowledge society, that is, the teacher needs to seek information to support his knowledge, so that he can deal with effective way with the many possibilities of working with teaching and learning in the digital age.

Finally, Kenski (2012) advises that the use of computers alone in teaching activities does not enhance challenging training for teachers, in this sense it is necessary, first of all, to reverse old practices, it is necessary to organize other pedagogical teaching experiences, guided by autonomy. In this course, ICT must be assimilated as a collaborative learning process, which values communicative, dialogical interaction and participation of everyone involved in learning.

## FINAL CONSIDERATIONS

Therefore, the authorship of digital culture/digital literacy is perceived as a possibility of emancipation for teachers, as it is in this that the possibility of producing knowledge and the critical elaboration of information and true digital inclusion can be seen.

To this end, the main agenda of education systems needs to be the encouragement of permanent training courses for educators, already confirmed in normative documents, such as the BNCC, as well as the need to encourage academic production, such as scientific articles, theses master's, doctorate and undergraduate degrees in the area.

Finally, it is believed that this article about digital literacy and teacher training, as well as the dialogues with the authors, cannot be seen in isolation.

It is necessary to understand the importance of the role of the educator as a premise for investing in their training, but this responsibility must not be transferred to the individual sphere, as this premise cannot be considered in isolation from other agents in

the teaching process. This effort must involve intellectual agents, managers, secretariats and everyone involved in the educational process, so that digital literacy can be implemented for teachers at the forefront of the learning process, and so that technology can be integrated into collaborative action in methodological practices of teaching and learning.

Therefore, given this evolving panorama of technologies, in which digital literacy has become an urgent demand, given the need for rapid mastery of digital tools, it remains here to reflect on how educators are positioning themselves as mediators in the construction of a critical citizen and emancipated and how this direction is reflected in our educational training practices.

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