DIGITAL INCLUSION IN FULL-TIME EDUCATION: IMPACTS ON ORGANIZATIONAL CLIMATE AND PROFESSIONAL DEVELOPMENT

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Ana Katherine Silveira Pereira Caracas[1], Emanuelle Grace Kelly Santos de Oliveira[2], Fabíola Fernandes de Menezes[3], Fernanda Maria Diniz da Silva[4], Irene Mendes Fontes[5], Jeckson Rubens Macedo de Lima Pereira[6], José Maria Campos de Oliveira Neto[7], Luciana Abreu Silvestre Costa[8], Onete Raulino da Costa[9], Rickardo Léo Ramos Gomes[10], Roberto Augusto Caracas Neto[11] and Sana Eteki Mboumena Mane[12].

ABSTRACT

Digital inclusion has become an essential element in the modernization of educational processes, particularly in the context of full-time schools, where the adoption of technologies can significantly impact both the organizational environment and the professional development of educators. From this perspective, this research was conducted using a qualitative approach, which is fundamental for investigations seeking to understand complex and dynamic phenomena, such as digital inclusion in full-time education. The methodological procedure adopted was a literature review, based on the analysis and study of more than 20 scientific works that supported the entire investigation. The general objective of this study is to analyze the impacts of digital inclusion in full-time education, with a focus on the organizational climate and the professional development of educators and human resources personnel. To achieve this, the research explored the transformations in the organizational environment resulting from digitalization, as well as the challenges and opportunities arising from the continuous training of teachers and the role of human resources professionals in managing digital inclusion. In summary, this study highlights the crucial role of digital inclusion as a driving force for changes in the organizational

[1] https://orcid.org/0009-0003-9374-9175
anakatherinespc@gmail.com
[2] https://orcid.org/0009-0005-9269-914X
manu.grace@prof.ce.gov.br
[3] https://orcid.org/0009-0007-6190-8820
fabiolamenezes2@yahoo.com.br
[4] https://orcid.org/0000-0002-3958-3077
fernandamdsilva@hotmail.com
[5] https://orcid.org/0009-0002-3152-6649
irenefontesrc@gmail.com
[6] https://orcid.org/0009-0009-7428-8143
jeckson_rubens@hotmail.com
[7] https://orcid.org/0009-0001-4097-6791
jmcampos79@gmail.com
[8] https://orcid.org/0009-0006-5217-053X
lucianasilvestracosta@gmail.com
[9] https://orcid.org/0000-0002-1975-7009
onete.raulinoc@gmail.com
[10] https://orcid.org/0000-0001-6101-9571
rickardolrg|@yahoo.com.br
[11] https://orcid.org/0000-0001-8484-411X
robertocaracas2000@gmail.com
[12] https://orcid.org/0009-0009-2491-1849
bamane2015@gmail.com

environment and professional progress in full-time educational institutions. The effectiveness of digital integration depends on the implementation of well-structured institutional policies, continuous teacher training, and efficient human resource management, thus ensuring a more equitable education aligned with the demands of contemporary society.

Keywords: Digital Inclusion. Full-Time Education. Professional Development. Educational Management.

INTRODUCTION

Digital inclusion in education has become an essential factor in modernizing teaching and learning processes, particularly in full-time schools. This educational model, characterized by an extended school day and diversified pedagogical activities, requires innovations that foster a dynamic and collaborative environment.

In this context, the integration of digital technologies into educational practices not only expands teaching possibilities but also directly influences the organizational climate of institutions and the professional development of educators and administrators. Given these aspects, it is crucial to investigate how digital inclusion affects daily school routines and what strategies can be adopted to maximize its benefits.

This research was conducted using a qualitative approach, which is essential for studies seeking to understand complex and dynamic phenomena such as digital inclusion in full-time education. The methodological procedure adopted was a literature review, based on the analysis and study of more than 20 scientific works that supported the entire investigation.

The general objective of this study is to analyze the impacts of digital inclusion in full-time education, focusing on the organizational climate and the professional development of educators and human resources personnel. To achieve this goal, the following specific objectives were outlined: Investigate how the implementation of digital inclusion can influence the organizational climate in full-time schools. Assess the impact of continuous digital training for educators on professional development and pedagogical improvement. Examine the role of human resources professionals in adapting to and managing digital inclusion within full-time schools.

The article is structured into four sections. Initially, the introduction contextualizes the topic and presents the research objectives. Next, the methodology section details the qualitative approach and the literature review procedure adopted. The theoretical framework is organized into three central subtopics: the effects of digital inclusion on the organizational climate, the importance of digital training for educators' professional development, and the challenges and strategies of human resource management in full-time education. Finally, the concluding remarks summarize the main findings and suggest directions for future research.

METHODOLOGY

This research was conducted using a qualitative approach, which is essential for studies seeking to understand complex and dynamic phenomena, such as digital inclusion

in full-time education. According to Lösch, Rambo, and Ferreira (2023), the qualitative approach allows for an in-depth exploration of meanings and social interactions, making it widely used in educational research to capture the nuances and specificities of the analyzed contexts.

The methodological procedure adopted was a literature review, based on the analysis and study of more than 20 scientific works that provided the foundation for the entire investigation. The literature review is recognized as a fundamental method in academic research, as it enables the construction of a solid theoretical framework and the identification of gaps in existing knowledge (Cavalcante; Oliveira, 2020). Furthermore, this method facilitates the consolidation of critical reflections on the investigated topics, contributing to the advancement of scientific discussions in the field of education.

As stated by Amado (2017), qualitative research, when combined with a literature review, allows for the triangulation of information and the articulation of different theoretical perspectives, enriching the understanding of the studied phenomenon. In this regard, the present study analyzed theoretical references discussing digital inclusion, organizational climate, professional development in teaching, and human resource management in full-time schools, providing the necessary foundation for the analyses conducted throughout the research.

The literature review was also based on the epistemological assumptions of phenomenology, as outlined by Husserl (2014), whose focus on subjective experience and the construction of meaning contributes to the interpretation of the transformations brought about by digital inclusion in the school environment. The analysis of the selected works enabled a critical examination of the challenges and opportunities associated with this transformation, highlighting the importance of institutional policies aimed at digital training and the adaptation of education professionals to new technological demands.

Thus, the qualitative approach and literature review proved to be appropriate for this investigation, providing a robust theoretical foundation and enabling the formulation of well-supported conclusions regarding the impacts of digital inclusion in full-time education. The adoption of these methods reinforces the relevance of the research and its potential to inform future studies in the fields of education and technology.

THEORETICAL FRAMEWORK

The theoretical framework of this study is structured into three essential subthemes that reflect the key aspects analyzed throughout the research. The first subchapter, Digital Inclusion and Its Effects on the Organizational Climate of Full-Time Schools, examines how

the incorporation of digital technologies influences school dynamics and interactions, fostering transformations in the organizational culture. Next, the second subchapter, Professional Development of Educators: The Importance of Digital Training for Pedagogical Practice, discusses the significance of continuous teacher training in the use of technological tools, highlighting its impact on teaching quality and pedagogical innovation. Finally, the third subchapter, Human Resource Management in Full-Time Education: Challenges and Strategies for Digital Inclusion, explores the role of school management in implementing digital inclusion, emphasizing the challenges encountered and the strategies employed to facilitate this process. This structure aims to provide a well-organized and in-depth analysis of the topic, ensuring coherence and consistency in the research.

DIGITAL INCLUSION AND ITS EFFECTS ON THE ORGANIZATIONAL CLIMATE OF FULL-TIME SCHOOLS

Digital inclusion in the educational context has become one of the most significant pillars in the development of full-time schools. Barbosa, Silva, and Echalar (2023) emphasize that the incorporation of technologies into the school environment not only facilitates access to information but also contributes to the process of social inclusion. When properly implemented, digital inclusion can transform the organizational climate of schools, fostering a more dynamic and collaborative environment where both teachers and students have the opportunity to explore new teaching and learning methodologies. The integration of technological devices into daily school activities enables students to expand their competencies, stimulating their autonomy and engagement with the content, which, in turn, can positively influence the overall school environment.

Although educational and information communication technologies contribute to the development of an efficient and inclusive learning environment for both students and teachers, digital inclusion in the use of Information and Communication Technologies (ICT) to support students with special educational needs has remained inadequate. According to Silva et al. (2022), most hardware and software are designed for the general population without an industrial focus on developing products with adaptable options for individuals with disabilities or spectrum disorders.

These technologies have driven changes in education within school institutions, stimulating new practices, concepts, and organizational models in the economy and society. They have also influenced social relationships, extended the memory of ICT, and introduced innovations that ensure new possibilities for well-being. This perspective

encourages a reconsideration and improvement of education through new pedagogical tools (Silva et al., 2022).

The impact of digital inclusion on the organizational climate of full-time schools is also closely linked to the role of technology in public education policies, as highlighted by Heinsfeld and Pischetola (2020). Digital inclusion policies have the potential to redefine pedagogical practices, fostering a more equitable and collaborative environment for all stakeholders in the educational process. Such changes in the organizational climate are not limited to the physical aspects of the school but also contribute to building a more inclusive and democratic environment, where technologies serve as tools for educators' professional development and the promotion of equal opportunities for all students, regardless of their social background.

Table 1: Digital Inclusion and Its Effects on the Organizational Climate of Full-Time Schools

Aspects	Effects on Organizational Climate	Authors
Technology Integration	Creation of a dynamic and collaborative environment, fostering greater autonomy for students and teachers	Barbosa, Silva e Echalar (2023)
Public Policies for Digital Inclusion	Redefinition of pedagogical practices, promoting a more equitable and democratic environment	Heinsfeld e Pischetola (2020)
Reduction of Social Inequalities	Improved access to educational resources, making the environment more inclusive and accessible	Echalar e Peixoto (2017)
Social and Educational Transformation	Strengthening a culture of collaboration and innovation, promoting the professional development of educators	Gomes, Duarte e Rocillo (2020)

Source: Research Data

The study conducted by Echalar and Peixoto (2017) on the "One Laptop per Student" program illustrates how access to digital technology can be a crucial element in reducing social inequalities within the school context. By investigating the effects of this program in full-time schools, the authors highlight that the integration of technologies into the school environment allows students from diverse social backgrounds to access educational resources that were previously restricted, thereby fostering a more inclusive and equitable organizational climate. Thus, digital inclusion directly contributes to transforming the school environment, making it more accessible and conducive to the holistic development of students.

In this regard, Gomes, Duarte, and Rocillo (2020) discuss digital inclusion as an essential public policy for building a fairer and more egalitarian society. Digital inclusion in

full-time schools, therefore, serves as an instrument of social and educational transformation. As technologies become more prevalent in daily school life, improvements can be observed not only in students' academic performance but also in strengthening a culture of collaboration and innovation within educational institutions. Consequently, digital inclusion profoundly alters the organizational climate of schools, creating an environment that is more conducive to educators' professional development and students' meaningful learning.

PROFESSIONAL DEVELOPMENT OF EDUCATORS: THE IMPORTANCE OF DIGITAL TRAINING FOR PEDAGOGICAL PRACTICE

Brazil's educational policies are fundamentally guided by international organizations. This decision follows formal recommendations after Brazil's adherence to the World Conference on Education for All, promoted by UNESCO and the World Bank, which are structured around economic analysis, poverty reduction, social inclusion, and attention to diversity. The first aspect focuses on maintaining competitiveness in the context of globalization and market diversification, while the second seeks ways to promote citizenship through solidarity and the mitigation of social conflicts (Silva, 2022).

The professional development of educators, particularly in a digital context, is crucial for improving pedagogical practice. Continuous digital training not only enables teachers to effectively use technology in the classroom but also transforms their teaching approaches.

According to Pereira and Santos (2024), adequate professional training in the use of Information and Communication Technologies (ICT) is essential for educators in lower and upper secondary education to integrate these tools effectively into their pedagogical practices. Their research highlights that a lack of training can limit the potential of ICT, leading to a superficial application that does not significantly enhance student learning.

Table 2: Key Aspects of Digital Training for Educators

Aspects	Description
Importance of Digital Training	Continuous Professional Development of Educators for the Effective Use of ICT in Pedagogical Practice
Impact on Pedagogical Practice	Transformation of teaching approaches, fostering active methodologies and student-centered frameworks
Competencies Required	Development of digital, ethical, and critical skills for responsible technology utilization
New Training Scenarios	Reassessment of teaching practices in light of technological innovations and contemporary demands

Source: Silva and Ramos (2023)

Silva and Ramos (2023) emphasize that the impact of digital technologies on initial teacher training is significant. The authors argue that continuous professional development should be viewed as an integrated process within educators' daily practice, enabling critical reflection on pedagogical approaches. This approach not only enhances teachers' digital competencies but also fosters more active and student-centered teaching methodologies, essential for student engagement in the digital age.

Silva (2022) posits that technology becomes increasingly indispensable in education due to its accessibility and adaptability for new generations, particularly through mobile devices, tablets, and augmented reality tools, which improve educational processes for both teachers and students.

Silva e Anecleto (2019) assert that contemporary educators must develop knowledge and competencies to critically engage with technologies, adopting a transformative and ethical vision that shifts their focus from teaching to learning. In teacher training, educators should be positioned as active agents, redesigning practices for a networked society and aligning student learning with real-world dimensions and pedagogical frameworks.

Aires et al. (2019) complement this discussion by addressing the competencies required for full digital citizenship. The authors argue that educators must be prepared not only to use digital tools but also to cultivate ethical and critical understanding of their applications. This training should be continuous and adaptive, responding to rapid technological advancements and student needs.

Finally, Gatti et al. (2019) highlight that Brazil's evolving teacher training scenarios demand a reassessment of pedagogical practices in light of digital technologies. Their research suggests that training programs should incorporate practical experiences with ICTs, enabling educators to become protagonists in creating innovative and effective learning environments.

HUMAN RESOURCE MANAGEMENT IN FULL-TIME EDUCATION: CHALLENGES AND STRATEGIES FOR DIGITAL INCLUSION

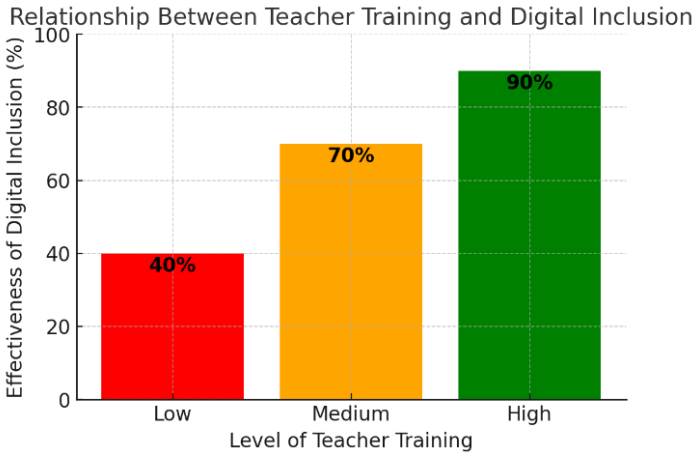
Human resource management plays a pivotal role in implementing digital inclusion in full-time schools, requiring strategies that align technology and education equitably. Codes, Araújo, and Turchi (2024) emphasize that digital transformation in educational settings must focus not only on adopting new tools but also on training professionals to ensure technology is meaningfully integrated into teaching-learning processes. In this context, human resource managers must prioritize educators' continuous professional development, ensuring technology use is effective and accessible to all students.

Ferreira et al. (2024) highlight structural challenges in school management's adaptation to technological demands, including investments in digital infrastructure and policies addressing socioeconomically diverse student populations. Resistance to innovation among some professionals further complicates the implementation of technology-based pedagogical practices. Thus, human resource management must develop engagement and training strategies to mitigate these barriers and foster an innovation-driven school culture.

Within the Education 4.0 framework, Çetin and Karsantik (2022) stress the importance of educational leadership in planning and executing technological initiatives that promote personalized, interactive learning. School administrators' actions should prioritize active listening to educators and students, as noted by D'Maschio (2023), ensuring decisions reflect the school community's genuine needs. Consequently, human resource management transcends mere personnel administration to cultivate environments valuing adaptation to digital demands.

Facer and Selwyn (2021) caution against uncritical optimism in adopting educational technologies, urging awareness of structural inequalities in digital access. Aligning with this perspective, Lacerda (2022) argues that school management must adopt a strategic model ensuring equitable technology use, guaranteeing digital education benefits all students regardless of socioeconomic background. Therefore, human resource professionals' role in digital inclusion must be guided by a proactive, comprehensive vision addressing both challenges and opportunities presented by emerging technologies.

Grafic 1 - Relationship between teacher training and the effectiveness of digital inclusion in full-time schools, based on findings by Codes, Araújo, and Turchi (2024).



Source: Codes, Araújo e Turchi (2024).

Graph 1 illustrates the relationship between teacher training and the effectiveness of digital inclusion in full-time schools, based on the findings of Codes, Araújo, and Turchi (2024). It demonstrates a positive correlation between the level of teacher training in

educational technology and the effectiveness of digital inclusion in schools. In other words, the greater the investment in teacher training, the more effective the implementation of digital practices in the school environment becomes.

Ethically and critically, educators face challenges in a networked society. These include the ability to develop students' communicative expression skills to participate and interact with a global world, as well as to stimulate understanding and learning aimed at the students' labor and professional development, based on values and attributes such as flexibility, creativity, and inventiveness for innovative solutions (Silva; Anecleto, 2019).

In general, the graph reinforces the idea that digital inclusion in education does not depend solely on the availability of technology, but essentially on the qualification of the professionals who use it. This supports the arguments of Facer and Selwyn (2021) about the importance of critical and strategic educational planning, avoiding superficial technological solutions that do not address real pedagogical needs.

FINAL CONSIDERATIONS

The research adequately fulfilled the established objectives by investigating the effects of digital inclusion in full-time education, focusing on the organizational environment and the professional advancement of educators, as well as the human resources team. The results demonstrated that the digitization of the school context leads to significant changes in the institutional dynamics, impacting the interaction among participants in the educational process and their professional practices.

Regarding the connection between digital inclusion and organizational climate in full-time educational institutions, it was found that the implementation of digital technologies fosters the creation of a more collaborative and innovative environment. The study indicated that the acquisition of technological tools facilitates communication and problem-solving, creating a more agile and flexible work environment. However, obstacles were also recognized, such as resistance from certain professionals to technological innovations and the need for continuous support to realize the digital transition.

Concerning the professional development of educators, it was evidenced that digital training plays a fundamental role in teacher qualification and the optimization of pedagogical practices. The study indicated that continuous training in technology enhances teaching practice, promoting the adoption of more interactive teaching strategies aligned with the current demands of education. In contrast, the lack of consistent policies focused on digital training can limit the benefits of technological inclusion, emphasizing the importance of well-structured and easily accessible training programs.

Human resource management emerged as a crucial element for the effectiveness of digital inclusion in full-time educational institutions. The research demonstrated that human resources professionals play a key role in devising strategies for technological adaptation, facilitating the creation of conditions conducive to the adoption of technological innovations. However, structural and institutional barriers, such as budget constraints and the absence of appropriate infrastructure, continue to present considerable obstacles to the realization of digital inclusion.

In light of these findings, it is recommended that future studies deepen the analysis of the influence of digital inclusion in various educational contexts, encompassing not only full-time educational institutions but also other educational formats. Additionally, it is pertinent to investigate how different teacher training methodologies can enhance the use of technology in basic education. Another promising avenue is the study of public policies focused on school digital infrastructure and their relationship with educational quality.

In summary, the investigation highlights the fundamental role of digital inclusion as a driving force for change in the organizational environment and professional development in full-time educational institutions. The effectiveness of digital integration is contingent upon the implementation of well-organized institutional policies, continuous educator training, and effective human resource management, thus ensuring a more equitable education aligned with the demands of today's society.

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