

Between recognition and practice: signs of a digital teaching culture in the Early Years of Paranaíba-MS^I

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Abstract

This article analyzes the perceptions and narratives of teachers in the early years of elementary school in the municipal public school system of Paranaíba, MS, regarding the use of Digital Information and Communication Technologies (DICTs) in teaching practice, as well as identifies signs of the emergence of a digital teaching culture. This is an excerpt from a Final Course Project, grounded in Historical-Cultural Theory and the Freirean perspective on mediation and teacher autonomy. The research adopted a qualitative approach, with data collected through an online questionnaire administered to 12 teachers. The results indicate that teachers recognize the pedagogical potential of TDICs, yet their use remains sporadic and instrumental, constrained by structural limitations and a lack of technical-pedagogical support. However, emerging trends of teacher-led creativity and innovation are evident, such as the creation of digital materials and interactive activities. It is concluded that the digital culture among teachers is in the process of being built, requiring contextualized continuing education policies, adequate infrastructure, and collaborative spaces that foster the critical and creative appropriation of technologies in the school context.

Keywords: Digital teaching culture; Basic Education; continuing education; TDICs; Historical-Cultural Theory.

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Entre o reconhecimento e a prática: indícios de uma cultura digital docente nos Anos Iniciais de Paranaíba-MS

Resumo

Este artigo analisa as percepções e narrativas de professores dos anos iniciais do Ensino Fundamental da rede municipal pública de Paranaíba-MS acerca do uso de Tecnologias Digitais de Informação e Comunicação (TDICs) na prática pedagógica, bem como identifica indícios de constituição de uma cultura digital docente. O estudo constitui um recorte de Trabalho de Conclusão de Curso, ancorado na Teoria Histórico-Cultural e na perspectiva freireana de mediação e autonomia docente. A pesquisa adotou abordagem qualitativa, com dados coletados por meio de questionário on-line aplicado a 12 professores. Os resultados indicam que os docentes reconhecem o potencial pedagógico das TDICs; porém, seu uso ainda ocorre de forma pontual e instrumental, condicionado por limitações estruturais e ausência de suporte técnico-pedagógico. Evidenciam-se, contudo, movimentos emergentes de autoria e invenção docente, como a criação de materiais digitais e atividades interativas. Conclui-se que a cultura digital docente se encontra em processo de construção, o que demanda políticas de formação continuada contextualizadas, infraestrutura adequada e espaços colaborativos que favoreçam a apropriação crítica e criativa das tecnologias no contexto escolar.

Palavras-chave: Cultura digital docente; Educação Básica; formação continuada; TDICs; Teoria Histórico-Cultural.



Entre el reconocimiento y la práctica: indicios de una cultura digital docente en los Primeros Años de Paranaíba-MS

Resumen

Este artículo analiza las percepciones y narrativas de los profesores de los primeros cursos de la enseñanza primaria de la red pública municipal de Paranaíba (MS) sobre el uso de las Tecnologías Digitales de la Información y la Comunicación (TDIC) en la práctica pedagógica, además de identificar indicios de la formación de una cultura digital docente. Se trata de un extracto de un trabajo de fin de curso, basado en la teoría histórico-cultural y en la perspectiva freireana de mediación y autonomía docente. La investigación adoptó un enfoque cualitativo, con datos recopilados mediante un cuestionario en línea aplicado a 12 profesores. Los resultados indican que los docentes reconocen el potencial pedagógico de las TDIC, pero su uso sigue siendo puntual e instrumental, condicionado por limitaciones estructurales y la falta de apoyo técnico-pedagógico. Sin embargo, se observan movimientos emergentes de autoría e invención docente, como la creación de materiales digitales y actividades interactivas. Se concluye que la cultura digital docente se encuentra en proceso de construcción, lo que exige políticas de formación continua contextualizadas, una infraestructura adecuada y espacios colaborativos que favorezcan la apropiación crítica y creativa de las tecnologías en el contexto escolar.

Palabras clave: Cultura digital docente; Educación básica; formación continua; TDICs; Teoría Histórico-Cultural.



Introduction

In recent decades, the expansion of Digital Information and Communication Technologies (DICTs) in Brazilian schools has redefined educational practices and demanded new ways of teaching and learning. Digital culture, marked by the circulation of information, interactivity, and the collaborative production of content, requires that teachers develop skills that go beyond technical mastery, incorporating ways of acting, creating, and mediating knowledge in digital environments.

Despite this scenario, research indicates that the process of integrating DICTs into pedagogical practice still occurs unevenly and non-linearly, demonstrating a gap between recognizing the educational potential of technologies and their effective appropriation in the classroom (Gatti, 2008; Kenski, 2023; Pretto, 2002). This hiatus reveals that the transformation of teaching practices depends not only on access to technological resources, but also on institutional conditions, continuing education policies, and situated professional development.

Recent data from the ICT in Education 2024 survey corroborate this perspective by indicating that, although 54% of teachers participated in training activities related to DICTs in the year preceding the survey, in municipal networks this rate fell from 62% (2021) to 43% (2024), signaling a weakening of public policies aimed at teacher digital development. Furthermore, most training focuses on the instrumental use of platforms and applications, while topics such as media education, digital safety, and the critical use of technologies receive less emphasis (Núcleo de Informação e Coordenação do Ponto BR, 2025). These results signal that, although training initiatives exist, a gap persists between the mastery of technological artifacts and the consolidation of a critical and collaborative digital teaching culture.

Given this situation, understanding how teachers in the early years appropriate DICTs in their daily practice constitutes a relevant issue for the



field of teacher training and educational policies. This article derives from the Course Completion Work “Continuing Education and the Use of Digital Information and Communication Technologies (DICTs) in Pedagogical Practice in the Early Years: A Study in the Municipal Network of Paranaíba-MS”, aiming to deepen specific aspects of the original study.

The study originated from the existence of an exclusive position for technology teachers in the public municipal network of Paranaíba-MS, dedicated exclusively to the technology room and designated as PROGETEN². However, this position was abolished in 2023 and, from then on, performing the role of technology teacher began to require specific training in the field. In the interim, the initial research focused on continuing education developed in the municipality, from the perspective of teachers. The present text is an excerpt from this study, with the purpose of reflecting on digital culture in the school environment.

Based on this excerpt, the following guiding question was formulated: how do the perceptions and pedagogical practices of early-year teachers in the municipal network of Paranaíba-MS express the recognition and appropriation of DICTs, revealing signs of a digital teaching culture under construction? Based on this question, the objective of this article is to analyze the perceptions and narratives of early-year teachers regarding the pedagogical use of DICTs, identifying signs of the constitution of a digital teaching culture in the investigated municipal context.

The text is organized into four sections, in addition to this introduction: the theoretical framework discusses continuing education, technological mediation, and digital teaching culture; the methodological path presents the research procedures; the results section analyzes the empirical data based on the adopted framework; and, finally, the final considerations and implications of the study are presented.

Continuing education, technological mediation, and digital teaching culture



The incorporation of DICTs into the school context requires more than access to equipment: it demands teacher training capable of articulating technical mastery, critical reflection, and pedagogical intentionality. In this regard, Kenski (2023) emphasizes that training for the use of technologies should favor authorship and the construction of innovative practices, overcoming training models centered solely on tools. Similarly, Gatti (2008) highlights that training processes need to integrate theory, practice, and context, encouraging active teacher participation in the production of knowledge about their own teaching practice.

Such understanding converges with the Freirean vision of education, for which teaching requires research, problematization, and critical reflection on practice (Freire, 1996). This perspective shows that the use of technologies in the school environment cannot be reduced to the consumption of content; it is necessary to promote autonomy, dialogue, and intellectual emancipation. Thus, teacher training mediated by DICTs must create conditions for teachers to become subjects of their practice, capable of using technology as support for pedagogical mediation and the construction of meanings.

In the theoretical field, Historical-Cultural Theory (HCT) helps to understand technologies as symbolic and cultural instruments that mediate human activity. According to Vygotsky (2000), development occurs through processes of interaction and mediation, in which external tools and signs are gradually internalized and transformed into psychological instruments. DICTs, when pedagogically appropriated, cease to be merely technical devices and come to constitute mediators of learning, communication, and the collective creation of knowledge.

Contemporary studies reinforce this articulation. Moraes and Lima (2019) show that digital artifacts become cultural instruments when they enable cognitive exchanges, collaboration, regulation of thought, and conceptual elaboration. The authors highlight that continuous interaction with technologies in collaborative training practices expands teachers' Zone of Proximal



Development (ZPD), allowing the internalization of digitally mediated ways of acting and thinking. In this way, the pedagogical appropriation of DICTs is not immediate, but involves a sociocognitive process marked by mediation, problematization, and experimentation.

Ferreira, Dal Pizzol, and Mello (2024, p. 4) corroborate this understanding by stating that DICTs are cultural elements, constituted by human production, “[...] and the school, as responsible for the diffusion and production of accumulated scientific knowledge, holds responsibility regarding educational work in the context of cyberculture”. It is up to teachers, therefore, to assume the place of technology in the teaching and learning process; however, one cannot reduce its possibilities to tools and instruments of sporadic use.

In this horizon, Leontiev’s (1978) contribution expands the historical-cultural understanding of the relationship between subject, culture, and learning. By sustaining the socio-historical nature of the human psyche, the author emphasizes that each individual learns to be human through the cultural productions accumulated by previous generations, since “[...] man is a social being and, outside the relationship with society, would never develop the qualities, the characteristics that are the result of the methodical development of all humanity” (Prestes; Tunes, 2018, p. 90). Thus, educational processes involve the active appropriation of cultural objects and practices, rather than simple exposure to external stimuli or resources.

To illustrate the process of appropriation through the example of acquiring an instrument, Leontiev (1978) describes it as a product of material culture and a social object, historically constructed to meet human needs. Such acquisition implies appropriating the operations incorporated within it, constituting a formative process that promotes new skills and higher functions: “[...] appropriating the motor operations incorporated into it. It is also an active process of forming new skills, higher psychomotor functions, which enrich one’s motor sphere” (Leontiev, 1978, p. 269). Furthermore, this movement necessarily occurs in relationship with the other, through communication and social life,



since, to appropriate humanity's historical results, the child needs to enter into relationship with the world "through other men", constituting this process as education (Leontiev, 1978, p. 272).

By transposing such understanding to the contemporary context, digital technologies can be understood as cultural instruments whose symbolic operations and modes of use are socially produced and historically accumulated. Thus, appropriating DICTs pedagogically implies more than using them technically: it is a sociocultural process of education in which teachers and students learn to act and think in a mediated way, incorporating languages, communicative practices, and forms of knowledge organization typical of cyberculture. Therefore, the responsibility of school education in transmitting and re-elaborating humanity's cultural achievements is reaffirmed, because, as Leontiev (1978, p. 273) states, there is a close relationship between historical progress and the development of education, making it possible "to judge the general level of historical development of society by the level of development of its educational system and vice versa".

In this direction, Vygotsky (2000, p. 115) reinforces that learning constitutes "[...] an intrinsically necessary and universal moment" for the development of historically formed human characteristics, which requires intentionally organized and mediated educational practices.

Thus, when considering the social and cultural needs that mobilize human activity, such as the search for new knowledge, communication, and social insertion (Luria, 1991), it becomes essential to rethink the place of DICTs in education, especially regarding the teacher's role in leading this process. It is inferred, therefore, that technology in school cannot be treated as an accessory element, but as a cultural instrument whose educational power is realized through pedagogical intentionality, critical mediation, and teacher authorship.

Based on this framework, digital teaching culture emerges as a result of the integration among pedagogical practices, values, attitudes, and modes of knowledge production in digital environments. This culture is not restricted



to the use of digital technologies as an external or auxiliary resource, but is shaped in the communicational, collaborative, and authorial practices developed in school daily life, in dialogue with contemporary ways of producing and sharing knowledge. In this perspective, digital culture is consolidated when teachers understand technology as a constituent part of their teaching action and, therefore, requires public policies for continuing education that promote collaboration, authorship, and the network circulation of knowledge, expanding teacher participation in contemporary digital culture (Pretto, 2002; Bonilla; Pretto, 2015).

In addition, Nóvoa (2017) argues that professional teacher development implies assuming teaching as a space for authorship, creation, and sharing. In the author's view, professional identity is strengthened when teachers have the opportunity to innovate, produce materials, and redesign their practices based on collaborative interactions and digital technologies. For this reason, digital teaching culture manifests progressively when the teacher moves from the sporadic use of tools to the development of reflective, creative, and contextualized practices in the school environment.

Thus, it can be said that continuing education and digital teaching culture are interdependent dimensions of professional development. The former provides spaces for mediation, dialogue, and investigation; the latter is expressed in school daily life through the transformation of practices and the internalization of ways of acting mediated by technologies. Understanding this dynamic is fundamental to planning educational policies and actions that move beyond technical training, strengthening autonomy, authorship, and collaboration in contemporary teaching practice.

Methodology

This study is an analytical excerpt from the Course Completion Work "Continuing Education and the Use of Digital Information and Communication Technologies (DICTs) in Pedagogical Practice in the Early Years: A Study in



the Municipal Network of Paranaíba-MS”, carried out within the scope of the State University of Mato Grosso do Sul (UEMS). The investigation adopted a qualitative approach, supported by descriptive quantitative data, aiming to understand teaching perceptions and practices related to the use of DICTs in the early years of Elementary School.

12 teachers³ from the early years of Elementary School in the municipal public network of Paranaíba-MS participated in the study. All worked in municipal public schools and voluntarily answered the research instrument. The selection was intentional, due to their direct work with early-year classes, an essential stage for the development of literacy practices and the introduction of school digital culture.

Data collection was carried out in the second semester of 2024, in a period following the intensification of the use of educational technologies, which influenced teachers’ perceptions regarding DICTs. Data were collected through an online questionnaire, created in Google Forms and composed of 15 questions, eight closed and seven open. The choice of this instrument was justified by the feasibility of access to participants, respect for the dynamics of teaching work, and the possibility of obtaining spontaneous discursive records, especially in open-ended questions. These addressed the professional profile of teachers, the frequency and purpose of DICT use, perceptions regarding their pedagogical potential, difficulties faced, training needs, and experiences of digital authorship.

Participants were not identified at any stage of the study, ensuring confidentiality and anonymity. The research followed the ethical principles set forth in Resolution No. 510/2016 of the National Health Council, presenting no risks to participants.

For data analysis, thematic analysis was employed (Bardin, 2016), aiming to identify interpretative patterns and recurrences of meaning. Responses were categorized into three axes: recognition of DICTs, instrumental use, and signs of digital teacher authorship. In this article, the focus fell specifically on the



open responses, revisited under the perspective of digital teaching culture, articulating the empirical findings with HCT and contemporary discussions on training and technological mediation in teaching.

It is highlighted that the qualitative nature of this research and the small number of participants do not allow expansion or generalization of the results to other educational contexts. The findings arise from local specificities, the experiences and practices lived by the participants, and the sociocultural conditions in which the investigation was conducted. Therefore, the principle of transferability is adopted, supported by a detailed description of the scenario, subjects, and processes investigated, leaving it to the reader to judge the relevance and possibility of approximating the results to contexts with similar characteristics.

Results and discussions

The analysis of the open responses in the questionnaire shows that digital teaching culture in the municipal network of Paranaíba-MS is in an emerging process, marked by tensions between recognition and practice, between functional use and initial movements of authorship. Teachers demonstrate an understanding of the relevance of DICTs; however, their use remains predominantly sporadic, unsystematic, and instrumental, aligned with goals of attractiveness and content reinforcement.

The participants' narratives indicate a recognition of the potential of technologies to expand student engagement and streamline teaching. Among the open questions, number ten requested that teachers describe the main benefits observed when using DICTs in the literacy process. Teachers expressed satisfaction with the use of DICTs; the majority highlighted that these contributed to a significant increase in student participation throughout classes, making learning more interactive and motivating, as evidenced by the following excerpts:



P9: “The use of technology for literacy stimulates creativity, autonomy, and makes the process more engaging for students.”

P12: “Students are more interested and participation is certainly higher.”

This symbolic recognition constitutes an important stage of appropriation, indicating openness to the digital realm and understanding of the pedagogical value of artifacts, even if not necessarily accompanied by consistent use. This aspect reinforces the important function of teacher mediation in the teaching-learning process, as Guimarães (2022, p. 10) emphasizes:

It is essential that, for activities using digital games as a playful tool, the teacher understands and exercises their role; they must maintain student focus on learning, so as to direct the use of games toward literacy skills. For this, prior interaction and monitoring of development during the use of this tool are necessary.

Guimarães (2022) emphasizes that although digital games can be powerful and engaging instruments in the learning process, the teacher’s role is fundamental to ensuring they are used in a targeted and productive manner. It is up to the educator to maintain focus on learning, select appropriate games for the skills to be developed, and monitor student progress in order to ensure the achievement of pedagogical objectives. In line with this understanding, Dal Pizzol, Bussolotto, and Lira (2022, p. 80) reinforce that:

[...] thinking about the use of virtual games in the educational context is much more than simply including game elements in didactic content, or turning content into games. When promoting digital games in the educational context, one must be clear about intentions both as a game and as a didactic activity, because the game must maintain clear characteristics of non-obligation, freedom, and interaction. It is a much more intricate strategy that should aim to create a terrain where 21st-century children and youth can interact, create, modify, solve problems, and combine this with their educational process.

Another question brought to light the challenges of using DICTs in the school environment. When analyzing the participants’ responses, a convergence of concerns was observed, the main ones being the poor quality of internet connection and the insufficiency of equipment. In addition to infrastructure



limitations, the need for technical and pedagogical support emerged. Among the various positions recorded, some clearly synthesize these difficulties:

P5: "The school has no computers for student use, it lacks a technology room which is present in other schools, thus making access to computers and tablets impossible." P7: "Lack of knowledge in the technological area and lack of a support professional for it, available to the teacher." P10: "How can a school with nearly 1,000 students have only 18 working computers?"

Such structural and training limitations reinforce the diagnosis that teachers' appropriation of DICTs depends not only on individual willingness, but on institutional conditions and continuous educational policies (Gatti, 2008; Kenski, 2023; Pretto, 2002). In an analysis of academic literature on teacher training for digital culture, Costa and Moura (2023) show that the pedagogical appropriation of technologies tends to remain restricted to instrumental use when there are no consistent training policies, adequate infrastructure, and continuous institutional support. According to the authors, the constituent elements of new training perspectives are "[...] reflection in the training process; expansion of meanings around DICT; perception regarding new generations; trainer practices; collaborative learning; authorship; autonomy; digital literacy; digital citizenship; and a stance of lifelong learning" (Costa; Moura, 2023, p. 16).

The absence of continuing education that addresses actual teaching needs, combined with the inadequacy of equipment and internet access, represents a significant obstacle to the educational process. Without these resources, integrating DICTs into the school sphere is limited or unfeasible, compromising both methodological innovation and students' insertion into digital culture. Faced with this diagnosis, Silva and Vieira (2016, p. 40) emphasize the impact of technological deficiency:

Education will have no effect with highly qualified and skilled teachers if schools lack the minimum resources necessary to carry out pedagogical practice, and vice versa, because if there are structured spaces without qualified professionals to use them, it will be in vain. What is truly needed are appropriate public educational policies, so that these actions are



put into daily pedagogical practice, becoming part of the routine of the school, teachers, and students.

As the authors point out, educational excellence depends on the indivisibility between professional qualification and technical infrastructure. For this reason, it is imperative to develop effective public policies that guarantee not only material support, but also the continuing education of educators, ensuring that pedagogical innovation results in effective learning processes.

The thirteenth question asked participants to suggest essential improvements for integrating DICTs into the literacy process. The responses converged on the need to increase the quantity of devices (such as computers and tablets), ensure quality internet connection, and provide institutional support and specific training. According to the accounts, physical access to equipment is the necessary starting point to enable new practices:

P1: “The first step would be access to computers, followed by training for the teaching staff, as teachers could then access sites with interesting materials for students or even create games and applications to engage them.”

P2: “More training in the field considering the specificity of each school, financial incentives for a restructuring of equipment and technological environments in our school. Availability of one device per student.”

P3: “Provide technology rooms, and a qualified professional to assist teachers and students.”

This demand for continuous support finds backing in Jordão (2009), who asserts that teacher training must be a permanent process throughout one’s career. Given that new strategies and technologies constantly emerge, educators must adopt a researcher stance, seeking innovative ways to support learning.

The absence of basic infrastructure, however, generates a sense of helplessness in teachers, preventing methodologies from being applied effectively. For DICTs to reach their pedagogical potential, it is necessary to overcome the conception that technology is an end in itself. As highlighted by Ferreira, Dal Pizzol, and Mello (2025, p. 7),



[...] DTs [Digital Technologies], as cultural elements, need to be appropriated by children in a way that contributes to development. For this to occur, it is essential to overcome a merely instrumental or technical view of technologies, as well as their reduction to synonyms for 'novelty', 'innovation', or 'fads'. The appropriation of DTs requires intentional and contextualized planning, ensuring that their use is aligned with pedagogical practices and child development.

In light of this, the teacher's role becomes central: moving from a mere equipment operator to an articulator of intentional planning that transforms technical resources into instruments of cultural and cognitive mediation.

The last question sought to highlight the teaching perspective on how excessive technology use can hinder the literacy process. The synthesis of responses points to a fundamental concept: moderation. Teachers highlighted that the harm lies not in technology itself, but in its excessive or purposeless use, as observed in the following accounts:

P6: "I once witnessed a class in a technology room (at another school); the students were so excited to carry out the literacy activities that, even when there were errors in some tasks, they went back to the start of the game to get the questions right. Technology really engages our children."

P2: "While working with the First Grade, games like memory game, find the intruder, and spot the mistake enabled students with learning difficulties to develop reading and writing. Likewise in mathematics, working with games was a great help with the class."

P3: "In the content of fractions, where students learned in the classroom, then video lessons, then targeted games, they realized it in practice, learning much more."

From these observations, it is clear that the effectiveness of DICTs depends on planned use aligned with pedagogical goals, avoiding contextualized practices. In this direction, Silva and Vieira (2016, p. 26) corroborate the importance of mediation:

Targeted research, pedagogical games, reading and writing activities, and video viewing are activities that can be worked on in any discipline, in any grade, in any context. At this moment enters the main character, the teacher, who becomes the conductor of knowledge, the director for carrying



out the entire proposal; from then on, another obstacle emerges to putting this proposal into practice, because just like the equipment, we likewise find obsolete professionals without qualification or basic knowledge to provide students with this methodology; that is, the entire proposal becomes useless if there are no qualified professionals to execute the project.

As the authors argue, students must take an active role, but always under teacher guidance. Indeed, the teacher ceases to be merely an instructor and becomes the articulator who integrates digital tools into the school routine. The challenge, therefore, is not simply to insert technology, but to transform it into a dynamic resource that promotes learning without supplanting other essential forms of knowledge construction, such as reading printed texts and social interaction.

Although the teaching staff recognizes the positive impact of DICTs on student motivation and engagement, the precariousness of infrastructure, the lack of continuing education, and the scarcity of institutional support constitute significant obstacles to their effective pedagogical integration. Consequently, the full incorporation of these technologies requires public policies that prioritize the technological modernization of schools, enabling innovative pedagogical practices consistent with contemporary demands.

Final considerations

Based on the analysis of the perceptions and narratives of early-year teachers in the municipal network of Paranaíba-MS, it is possible to state that digital teaching culture is in an emerging process, situated between the recognition of the pedagogical potential of DICTs and their effective and systematic appropriation in daily school life. Teachers value technologies as resources capable of diversifying classes and engaging students; however, they face challenges in integrating them critically, creatively, and deliberately into the curriculum.

This transitional movement is crossed by structural and training constraints. Limitations such as scarcity of equipment, internet instability, and,



above all, the absence of technical-pedagogical support intensified by the abolition of the PROGETEN position compromise the continuity of practices and the consolidation of local educational innovation policies. Even so, experiences of authorship and collaboration emerge, revealing teacher agency in the face of adversity, which highlights the inventive capacity characteristic of the profession.

The research allowed for the identification of three levels of technological appropriation: symbolic recognition, expressed in the valuation of technologies; instrumental use, marked by sporadic and reinforcement practices; and signs of authorship, expressed in creative and mediating initiatives. These levels form a training continuum, demonstrating that the construction of a digital teaching culture occurs gradually, through experimentation, reflection, and peer exchange.

Through the lens of HCT, this journey represents a process of mediation and internalization: DICTs cease to be external tools and come to integrate the teacher's ways of thinking and acting. In convergence, Freirean pedagogy understands this path as a movement of conscientization and emancipation, in which the educator becomes a subject of their practice, a creator of pathways rather than a mere executor of technical prescriptions.

The findings reaffirm that continuing education is a structural element in the development of a digital teaching culture. It is not merely about offering courses on tools, but promoting collaborative training environments articulated with the real demands of the school, fostering authorship, autonomy, criticality, and the sharing of knowledge. Thus, strengthening digital teaching culture depends on an essential triad: adequate institutional and technological conditions, continuing education integrated into pedagogical practice, and the valuation of teacher authorship and collaboration.

It is through the intertwining of these factors that it becomes possible to bridge the distance between recognition and practice, promoting the creative, critical, and emancipatory use of DICTs. Digital teaching culture, therefore,



should not be viewed as an end to be reached, but as a living, collective, and permanent process, constructed within the daily experiences, resistances, and inventions that mark Brazilian public education.

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Notes

- 1 Statement on the Use of Artificial Intelligence – Gemini, an artificial intelligence tool developed by Google, was used to assist in translating this article into English. The translated version was fully reviewed and adjusted by the editorial team to ensure fidelity to the original text, terminological accuracy, and compliance with the journal's editorial standards. The tool was not used to generate the article's arguments, analyses, or academic content.
- 2 PROGETEN: Municipal Educational Technology Manager Teacher.
- 3 The participants will be identified by the letter P followed by a number, from 1 to 12 (P1 to P12).



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