

## THE TECHNOLOGICAL IMPERATIVE IN CHILDHOOD: the emphasis on digital technologies in early childhood education and primary education I

O IMPERATIVO TECNOLÓGICO NA INFÂNCIA: a ênfase das tecnologias digitais na educação infantil e no ensino fundamental I.

EL IMPERATIVO TECNOLÓGICO EN LA INFANCIA: el énfasis en las tecnologías digitales en la educación infantil y primaria

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### SUMMARY:

This article aims to characterize the technological imperative in childhood, primarily based on documents that determine digital technologies for Early Childhood Education and Elementary School I. In this sense, the trend of school educational practices increasingly associated with digital technologies. The research is exploratory and critical in nature, with selection and analysis of legal documents on education. It was concluded that the technological imperative is constituted by the emphasis on pedagogical resources, the acquisition of equipment, access to the computer network, with an instrumentalist pedagogical basis, with a focus on digital technologies as an object of use and teaching for the development of skills. It was noticed that the interests of owners force transformations in educational practices to maintain capital's profit rates, emphasizing digital technologies, and that the technological imperative develops a type of training for simple work, in an uncritical manner, causing harm to physical, mental and social health of the student.

**KEYWORDS:** Technological imperative; Digital technologies in childhood; Early Childhood Education; Elementary Education; National Digital Education Policy.

## Introduction

This article aims to characterize the technological imperative in childhood, primarily through documents that determine digital technologies for Early Childhood Education and Elementary School I. In this sense, we observe the trend of school educational practices increasingly associated with digital technologies. With this, we seek to answer the following question: what are the determinations made in policies that deepen the conditioning of Early Childhood Education and Elementary Education I to digital technologies? As a technological imperative in the educational field, we understand the demanding massification of digital technologies in teacher-student mediation, that is, the deepening of the implementation, use and teaching of hardware and software structures in Education as a whole, mainly through platforms, intelligence artificial and mixed reality (Microsoft, 2018).

To carry out this work, we adopted critical exploratory research (Sampieri *et al.*, 2006), in which our starting point was the choice of teaching stages Early Childhood Education and Elementary Education I, first phase. We start from the respective stages of Basic Education, as we question ourselves about the consequences of digital technologies in school since childhood in the objective and subjective formation of the working class. To this end, we selected as primary material for analyzing the determinations surrounding our object: (1) the Municipal Education Plan of Palmas (PME) (Palmas, 2016), state of Tocantins, established by Law No. 2,238, of January 19 of 2016 and amended by Law No. 2,243, of March 23, 2016; (2) the National Common Curricular Base (BNCC) (Brazil, 2018), established by Resolution CNE/CP No. 2, of December 22, 2017; and (3) the National Digital Education Policy (PNED) (Brazil, 2023), established by Law No. 14,533, of January 11, 2023.

Continuing with the methodological procedures, we read the aforementioned legal documents. As we carried out this exercise, the exploratory character (Sampieri, 2006) presented a close dialogue with the perspective of explanatory research (Richardson, 2010), while we also located elements in the textual body of the documents that signaled coherence with the proposed objective. This investigation aims to characterize the technological imperative present in public policies, whether micro (SME) or macro (BNCC and PNED) in scope.

As the documents were read, we found the assumption that educational policies, with regard to digital technology in pedagogical mediation, have a double character, different but combined: on the one hand, the emphatic insertion of digital technologies in school processes has as a backdrop a type of working class training, mostly for simple work, reducing the power of development of students' higher psychological functions, that is, the relegation of knowledge to the development of critical thinking (Martins, 2013); on the other hand, the emphatic insertion of digital technologies in school processes aims to collect, store and mine data obtained from classroom relationships, primarily pedagogical, which serve for machine learning, that is, sophistication of algorithms to increase capital profit rates to the detriment of human development. In other words, adjusting the needs for extracting surplus value while adjusting the training needs for work on platforms (Antunes, 2020; Grohmann, 2020; Gonsales, 2020).

This, to a certain extent, reinforces the reflections brought by Vieira Pinto (2005) who, when precepting the existence of several meanings of the term technology, presents that of 'technology as an ideologization of technology', whose gears move through the conversion of 'technical work into moral value' when making an effort to transform the technique/equipment in principle, consequently, makes it impossible for the subject to see and identify it in its real condition as an object. This time, as the author clarifies, the technique cannot receive moral qualitative, since this only applies to the human being (being good or evil), and therein lies the mistake in taking it as a salvationist from the ills they organize and at the same time structure socioeconomic disparities.

Along the same line of reasoning, we understand that the documents analyzed, which will be presented in greater detail in the following section, borrow this meaning of moral value from the technique. This, in turn, in addition to removing the social subjects (teachers and students) directly involved from centrality in the technological creation process, opens the way for the ideological parade of technique, now in the guise of digital technologies, to occupy all spaces and time. (real/virtual) and prevails in an indisputable way.

Digital technology, now surrounded by an aura of historical renewal of the meaning of public education and being established within public policies through goals, is also being suggested as a strategy for guaranteeing access to Digital Information and Communication Technologies (TDIC); as a defining element of skills aimed at capturing informational skills aimed at developing computational thinking adjusted to the idea of technical learning; while using technological devices as teaching accessories (tables and/or interactive tables) in early childhood school education. Finally, the foundational

principle in the institution of a national policy, which is coated with an aura of updating the Law of Guidelines and Bases (LDB) (Brazil, 1996) brings together forces around protagonizing in its articles and paragraphs the 'universalization of connectivity' disguised as an agenda of 'digital education', but which, in the end, will unfold into educational practices both within the scope of Early Childhood Education and Primary Education in the first phase, but emptied of meeting the real needs that each public school presents in their different regions and teaching modalities.

In view of the above, we consider it necessary to present with greater particularity in the following section the documents that we accept as primary analysis material: the PME of Palmas in force since 2016, the BNCC (Brazil, 2018) and sections that underwent revisions in 2018 and 2019, as well as Law No. 14,533 of January 11, 2023, which establishes the National Digital Education Policy (PNED). It is important to remember that the reading of the aforementioned texts sought to respond to the concern about which determinations made in public policies deepen the conditioning of Early Childhood Education and Elementary Education I to digital technologies, indicating elements of determination capable of signaling, and therefore, characterizing the occurrence of the technological imperative and, thus, establish reflections on the digital trends that are emerging in the educational field.

Finally, considerations are made on the challenges that are imposed on federated entities given the premise that the world is constantly changing and that the relationships that take place within education as a social policy are determined by the State, which is an equipment of the bourgeoisie for the continuity of labor exploitation (Engels, 2019), which requires us to build collective intelligence (Lèvy, 1999), collective will (Gramsci, 1999; 2001) for overcoming. Education is directed by the State, this presupposes that it is directed by national and international groups and corporations and we also need, within it, to put social projects into dispute through pedagogical mediation (Saviani, 2014).

Therefore, it is no longer possible to deny or ignore the social conditions of inequality and the need for workers to organize around these issues. Since the future of young children and young people, by not aligning themselves with Digital School Education (BRASIL, 2023), will certainly continue to be outside of social inequalities, given that the social fabric is now also woven by the webs of online, digital platforms, the practical and urgent use of mobile devices (smartphones, tablets), the development of digital skills proposed by multilateral organizations (Ribeiro; Raichelis, 2012; SILVA *et al*., 2021) and taken up by the documents analyzed in the present work.

## General overview of PME Palmas, BNCC and PNED: the technological imperative in legal documents aimed at Early Childhood Education and Elementary Education I

The interest in the theme undertaken here arose when we observed the Municipal Education Plan of Palmas (PME), Tocantins, specifically in Goal 1, which deals with the expansion of Early Childhood Education in the municipality. In this Goal, the text of the plan considers strategies, including “[...] guaranteeing children aged 4 (four) to 5 (five) years of age access to information and communication technologies [...]” (Palmas, 2016, item 1.13, p. on the other hand, we observed that “Early Childhood Education serves the age group from 0 (zero) to 5 (five) years old” (Brasil, 2018). Therefore, we consider that the municipality of Palmas, through the PME, emphasizes the offer of digital technologies starting in pre-school. Otherwise, there is an emphasis on the use of digital technologies in early childhood, that is, among children from 0 (zero) to 6 (six) years of age (Lopes *et al.*, 2023).

As a materiality of the offer of digital technologies for children aged 0 (zero) to 5 (five) years old, we mention the acquisition of educational tables from Positivo Tecnologia SA <sup>1</sup>by the Municipality of Palmas. This process requires the creation of a Fiscal Execution Commission <sup>2</sup>and the signing of a contract directing more than R\$2 million<sup>3</sup> for the acquisition of this technological device. For Educacional Ecosistema de Tecnologia e Inovação <sup>4</sup>, which is considered an arm of Positivo Tecnologia SA, the educational tables will help the child in the literacy process in a playful way. This demonstrates to us the involvement of PME de Palmas in educational practices mediated by digital technologies through private companies with public investment.

This imperative placed on the PME (Palmas, 2016) is reinforced by also considering in its strategies the need to assess “[...] pedagogical resources [...]” (Palmas, 2016, 1.3, p. 4) and implement “[...] toy libraries with multifunctional resources” (Palmas, 2016, 1.7, p. 5). Regarding literacy, in Goal 3 of the PME (Palmas, 2016), the use of digital technologies appears linked to ensuring literacy, improving school flow and student learning; in the same way that it considers the continued training of teachers for literacy

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<sup>1</sup>Edition No. 2,873, December 8, 2020, Ordinance/GAB/SEMED No. 463/2021, December 6, 2021.

<sup>2</sup>Edition No. 2,884, December 23, 2020, Ordinance/GAB/SEMED No. 0476/2021, of December 17, 2021.

<sup>3</sup>Edition No. 2,881, December 20, 2020, Contract Extract No. 012/2021.

<sup>4</sup>Educational Technology and Innovation Ecosystem develops innovative and personalized educational solutions for schools, education networks and municipalities.

based on knowledge of new technologies.

In the same way, the PME in Goal 5, which deals with the quality and development of Basic Education, considers as a strategy to establish, with the support of the State and the Union, a policy for the development of educational technologies and innovative pedagogical practices for Early Childhood Education and for Elementary Education, a diversity of methods and pedagogical proposals is ensured, with preference for free software and open educational resources (Palmas, 2016). Still in Goal 5, the document emphasizes the guarantee of “[...] computer/student relationship in School Units of the municipal public education network, [...] the pedagogical use of information and communication technologies [...]” (Palmas2016, 5.13, p. 14), which presupposes the emphasis on the machine-student relationship and its relative irrelevance to the teacher-student relationship.

In other words, it involves the “[...] expansion and development of pedagogical resources [...]”, the “[...] acquisition of equipment for public schools [...]” and “[...] access to the world wide web [...]” (PALMAS, 2016, 5.6, p. 13, 15). For us, the emphasis on pedagogical resources is on maximum student interaction with hardware and software applications, which is available in the PME through the acquisition of equipment for pedagogical mediation for the collection of data and metadata on the child's interaction with digital technology (Braz, 2021; Taulli, 2020). Thus, access to the global computer network is the guarantee that data and metadata will be collected and stored for the sophistication of algorithms, the well-known technology transfer (FAPEMIG, 2024).

The BNCC (Brazil, 2018), in turn, is a document that presents definition standards for 'essential learning', which students must develop during all stages of Basic Education. It is dedicated exclusively to school education and is in line with the provisions of the National Education Plan (PNE), which is the basis for the National Curricular Guidelines for Basic Education (Brasil, 2019). The main objective of the plan is the development of skills, which will guide school curricula towards what students 'should know' and what they 'should know how to do', learning to learn (Duarte, 2011).

However, if we follow the same reading path taken by Heinsfeld and Silva (2018), analyzing the second and third versions of the BNCC, it is possible to identify two distinct concepts of digital technologies in the discursive context of the document. In the version of the document published in 2018, digital technologies are seen as technological resources with great potential for use in the classroom, however, in the third revised version published in 2019, the discourse of enhancing technological resources at work is maintained teachers and students, in the process of producing knowledge, in addition

to defending them as the only way to access the development of a digital culture through pedagogical practices . Thus, an alignment of the relationship between technology and culture is perceived , in which technology presents itself as a sociocultural artifact, well associated with the definition of competence displayed as “[...] the mobilization of knowledge (concepts and procedures), skills (cognitive and socio-emotional practices), attitudes and values to resolve complex demands of everyday life, the full exercise of citizenship and the world of work” (Brasil, 2018, p. 8). However, optimism about the use of digital technologies in Early Childhood Education and Elementary Education reinforces the instrumentalist character that is so fruitful in the territory of common sense, which are explained with greater intensity as tools, technical artifacts , of optional appropriation , that is, responsibility the student who acquires knowledge regarding the usability of technologies and the acquisition of technological material on their own.

In the third version of the BNCC of 2019, we observed, like the aforementioned authors, mention of the existence of a digital culture, initially associated only with the appropriate way of working with information, that is, an instrumentalizing aspect without reference to the student's critical formation. However, the term digital culture is conceived as another expression, emerging and temporal, fully linked to the incorporation of digital technologies in education resulting from advances in nanotechnology, network communication connections in the access and sharing of information ( Kenski , 2018), to the point of highlight the need to promote permanent teacher training actions that enable continuous improvement of teaching and learning processes mediated by digital technologies.

Aware of this new condition, we note that in the 2019 version of the BNCC, the dimensions that characterize both digital technologies and computing are related to the development of computational thinking, the development of algorithms and their applications) to 'inclusion' in the digital world (big -data) and the 'construction of a critical culture', according to digital culture (Brazil, 2019), but maintaining the instrumentalist view of technology, imposing digital technologies for the purpose of maintaining class antagonism and the continued exploitation of work ( Feenberg , 2018).

The BNCC, when presenting general skills, highlights the use of “[...] knowledge of technological and digital languages [and of] digital communication and information technologies [...]” (Brazil, 2018, p. 18) . The BNCC reinforces the structuring axes of Early Childhood Education pedagogical practices set out in the National Curricular Guidelines

for Early Childhood Education (DCNEI): interactions and games. After that, it specifies the fields of experience, which are: the self, the other and the us; body, gestures and movements; lines, sounds, colors and shapes; and orality and writing. When discussing the field of experience 'traces, sounds, colors and shapes', the document highlights the "[...] manipulation of technological resources [...]" (Brasil, 2018, p. 37), relativizing that "[...] these experiences contribute so that, from a very young age, children develop an aesthetic and critical sense, knowledge of themselves, others and the reality that surrounds them [...]" (Brasil, 2018, p. 37), which for us, in essence, materializes the conditioning of the child's development for the constitution of the type of digital technology that capital needs to replace its profit rates. The emphasis on manipulating technological resources demonstrates the technological imperative, as it emphasizes placing technological devices in children's hands, conditioning the development of children's fine motor skills to digital technologies.

In view of the above and the collection of data and metadata of pedagogical relationships for the progressive development of algorithms, the capital need for children to be in continuous interaction with digital devices is assumed. When analyzing the centrality in the manipulation of digital devices,

[...] some psychomotor skills could suffer stunting influences on the development of basic body functions due to the fact that exacerbated exposure to the use of technology and increasing exposure to screens would end up generating less use and improvement of fine motor skills [...]" (Santana; Ruas; Queiroz, 2019, p. 174).

We observed that at BNCC "[...] each learning and development objective is identified by an alphanumeric code [...]" (Brasil, 2018, p. 24), which for us means, on the one hand, that these codes are for learning objectives for the purpose of training workers; on the other hand, they are for learning objectives with the purpose of processing data in algorithms, as data is produced and collected from students' interactions with digital technologies. In other words, with the emphasis on digital technologies in the classroom, hardware and software structures collect and store data related to a certain alphanumeric code.

As a materiality of this, the learning objective "[...] use sounds produced by materials, objects and musical instruments during pretend games, role-plays, musical creations, parties [...]" (Brasil, 2018, p. 24) corresponds to the alphanumeric code EI03TS01. In this way, based on the technological imperative in education, all 5.3 million



children enrolled in preschool (Brazil, 2024) develop activities for this learning objective in interaction with digital technologies, which collect data and metadata from the learning process. learning. Regarding the quality of sophistication of the algorithm as a means of production (Linden, 2023) that capital needs, the quantity of data collected, stored and mined is crucial. Therefore, this data collected from the child's learning interactions with digital technology plays a fundamental role in the development of algorithms. Or rather, the objectives of learning and the entire BNCC are set between, on the one hand, training the working class for simple work, developing human functions for market purposes; on the other hand, to establish learning objectives for the type of machine that capital needs to develop. The BNCC is dedicated to training the workforce, establishing the principles and objectives, which define the type of data for the type of development of the emerging machinery by capital to the detriment of the development of children.

In the same way, we observed this movement in Elementary Education. As stated in the BNCC, “[...] in the first two years of Elementary School, the pedagogical action must focus on literacy [...]” (Brazil, 2018, p. 55), assuming for this “[...] interaction with the most diverse information and communication technologies [...]” (Brazil, 2018, p. 54). In these terms, for the initial years of Elementary School, digital culture is included in the BNCC, which,

[...] presents a strong emotional appeal and induces the immediacy of responses and the ephemerality of information, favoring superficial analyzes and the use of images and more synthetic forms of expression, different from the ways of saying and arguing characteristic of school life (Brazil, 2018, p. 57).

This characterization of digital culture demonstrates the inability of school education mediated by digital technologies to develop critical and participatory thinking. Thus, it seems to us that these characteristics reduce the possibility of developing higher functions and expand educational training towards conformism and alienation from work, towards uncriticism.

Digital culture is also defended in the National Digital Education Policy, (PNED), determined by Law No. 14,533, published on January 11, 2023 and which has been well received by representatives of different sectors of the State and society, such as managers public, legal experts, educators, citizens and enthusiasts of new technologies and the digital era, emphasizing that the implementation of this government policy represents an advance in the Brazilian educational scenario, given its inclusive and

universalizing character of education through technological means, but, on the other hand, strident voices can also be heard about the ethical concerns regarding the use of virtual devices (Bernardes, 2023; Garofalo, 2023; Lucena *et al.*, 2023).

The law proposal is broad and aligned with innovative trends that have already been highlighted in the BNCC version published in 2019. The design of the proposal to expand the PNE, which presents new indicators for achieving goals, led to the occurrence of several changes in other legislation in force and repercussions on State bodies directly related to the execution of the PNED, for example, the Law of Guidelines and Bases of National Education (Brazil, 1996) was modified to include digital education as a duty of the State and the activities of the Institute National Institute of Educational Studies and Research (INEP) (Brazil, 1997) as the body directly responsible for coordinating the so-called Connected Education. The Higher Education Student Financing Fund (Brazil, 2001) and the National Book Policy (Brazil, 2003) also underwent changes, according to a document available for internet access .

The PNED is structured for “[...] access of the Brazilian population to digital resources, tools and practices, with priority for the most vulnerable populations” (Brasil, 2023, art. 1). This policy is structured along the lines of Digital Inclusion, Digital School Education, Digital Training and Specialization and Research and Development in Information and Communication Technologies. The Digital Inclusion Axis encompasses the promotion and training of digital skills, connectivity and the implementation and integration of connectivity infrastructure for educational purposes, which for us presupposes the necessary knowledge for the student to produce data with a focus on the skills that the machine needs to develop, while emphasizing connectivity, the implementation and integration of the fundamental infrastructure for transferring data to the databases of private companies in the sector.

The School Digital Education Axis “[...] aims to guarantee the insertion of digital education in school environments, at all levels and modalities [...]” (Brasil, 2023, art. 3), presupposing the emphasis of digital technologies, including throughout Basic Education, based on learning about hardware and the digital environment, which presupposes impacts on school content and teaching objects. Among its strategies, the “[...] promotion of projects and pedagogical practices in the domain of logic, algorithms, programming, ethics applied to the digital environment, media literacy and citizenship in the digital era stands out [...]” (Brasil, 2023, art. 3º, § 1º, II), which dialogues directly

with the change that PNED promoted in the LDB. According to an excerpt included in the LDB, “[...] digital education, with a focus on digital literacy and the teaching of computing, programming, robotics and other digital skills, *will be a curricular component of primary and secondary education [...]*” (Brazil, 1996, art. 26, § 11, emphasis added).

Apparently, the technological imperative in Early Childhood Education and Elementary Education I for educational practice materializes through different, but combined, parts. And among them, we mention the early handling of digital infrastructure and the inclusion of digital technologies as a curricular component. In accordance with what has been discussed so far, we observe that

[...] children have started contact with technological platforms very early (the first access between 0 and 6 years of age), connected to technological networks and systems inserted in a significant way for intellectual, physical or motor improvement (Santana; Ruas ; Queiroz, 2021, p. 175).

Furthermore, the harm and harm of using electronic devices in childhood stands out (Santana; Ruas; Queiroz, 2021), especially regarding screen lights, which “[harm] children’s sleep by making them more alert [causing] a reduction in melatonin, the sleep hormone, [...] which has implications for child growth and development” (Santana; Ruas; Queiroz, 2021, p. 176). Furthermore, digital technologies cause dissociation of cognition, child and adolescent development disorders, have increased autistic behaviors, corroborated by obesity, overweight, metabolic syndrome, insomnia and introspection (Santana; Ruas; Queiroz, 2021).

Among the consequences that the influence of the use of technology can cause to children, the harmful effects on physical and mental health are headaches, postural changes, vision impairment, impairment at bedtime and obesity; social problems, such as depression, anxiety, low self-esteem, learning problems, affinity with other people, neediness and aggressiveness (Taborda, 2019, p. 47).

For Costa and Badaró (2021, p. 250, emphasis added), the use of digital technologies can promote benefits in childhood, but they highlight the contradiction that “[...] *the losses to development stand out because they are considered factors of long term [...]*”. They also point out that the determinations of educational policies that introduce technologies early in childhood interactions, “[...] as the child in the sensorimotor stage is not capable of making the self-world differentiation, attributing

everything that happens in the external world as part of it, *early exposure to technological stimuli* becomes risky [...]" (Costa; Badaró, 2021, p. 251, emphasis added).

[...] the brain, to be built, needs sensory moderation, human presence, physical activity, sleep and favorable cognitive nutrition. The excessive presence of screens offers the opposite: perceptual bombardment; breakdown of interpersonal exchanges (especially intra-family); both quantitative and qualitative sleep disturbance; amplification of sedentary behaviors; and chronic insufficiency of intellectual stimulation. In this unhealthy environmental context, the brain suffers and its construction is damaged. It continues to function, however, with compromised potential and, once the periods of childhood brain plasticity are lost, they are unlikely to be resurrected (Lopes *et al.*, 2023, p. 2023).

In our understanding, among the reasons that strengthen the technological imperative in Early Childhood Education and Elementary Education, are found in the day-to-day testimony that education has experienced regarding the digitalization of work processes (Festi, 2020). We experience the materialization of a Network Society (Castells, 1999), which has made today's time-space rapid, ubiquitous with an increasing presence of online in everyday activities, in study environments, research, entertainment, production/ consumption of material goods, in the convergence of classic communication media (newspapers, magazines, television, radio, books), in content installed inside electronic devices such as smartphones, tablets, notebooks, work in numerous areas of knowledge and professional activity. Changes in the productive base will require capital to change educational policies and practices, the purpose of which is to generate the type of worker relatively related to the means of extracting surplus value (Marx, 2017)

### **Final considerations**

Bearing in mind the general objective of the text to characterize the technological imperative in childhood, primarily based on documents that determine digital technologies for Early Childhood Education and Elementary School I, we observe that the technological imperative is characterized by the early introduction of digital technologies, for the organization of pedagogical resources, which presupposes the computer/student relationship as a priority, and for the acquisition of equipment for public schools and access to the global computer network.

We highlight that this imperative presupposes 'learning to learn' for the development of skills, always of an instrumentalist nature. We highlight that the use of digital technology devices for the development of motor skills in Early Childhood Education is a point; just as digital culture is seen as inducing immediacy, ephemerality, superficial and uncritical analyzes of pedagogical mediation in Elementary Education.

We observed the recurring defense of access for the most vulnerable to resources, tools and practices for handling digital artifacts through digital inclusion, the institutionalization of a digital education concerned only with the insertion of machines into the context of teaching and learning that would not need to be mediated primarily by humans. In this way, the inclusion of knowledge content in the field of digital technologies, as a curricular component for Elementary Education, would be aligned with the demands required for education for the job market, but disconnected from effectively human training.

We note that the technological imperative can cause serious harm to the entire lives of children and young people who make up the Early Childhood Education and Primary Education phase. They, increasingly earlier, have been compelled to adopt the handling of digital electronic items in their daily habits, given the dynamics of digitalization of work, which, in turn, has brought harm to physical, mental and social health. of the child, taking into account the amount of time the child interacts with the machine.

It is worth highlighting that this imperative around technologies is also historically marked by the struggle of social classes, which takes place under the umbrella of the capitalist mode of production, which generates the unequal relations of knowledge and power that sustain class society. . Thus, the technological imperative has conditioned school training in a subtle, uneven and combined way by interests defined in the education of workers for work in the digital era, for the collection of data and metadata and for the sale of goods in the field of innovation and technology.

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**RESUMO:**

Este artigo tem como objetivo caracterizar o imperativo tecnológico na infância, prioritariamente a partir de documentos que determinam as tecnologias digitais para a Educação Infantil e para o Ensino Fundamental I. Nesse sentido, observou-se a tendência de práticas educativas escolares cada vez mais associadas às tecnologias digitais. A pesquisa é de caráter exploratória e crítica, com seleção e análise de documentos legais sobre educação. Concluiu-se que o imperativo tecnológico se constitui pela ênfase nos recursos pedagógicos, pela aquisição de equipamentos, pelo acesso à rede de computadores, de base pedagógica instrumentalista, com foco nas tecnologias digitais como objeto de uso e ensino para o desenvolvimento de competências. Percebeu-se que os interesses dos proprietários forçam transformações nas práticas educativas para a manutenção das taxas de lucro do capital, enfatizando as tecnologias digitais, e que o imperativo tecnológico desenvolve um tipo de formação para o trabalho simples, de maneira acrítica, provocando malefícios à saúde física, mental e social do estudante.

**PALAVRAS-CHAVE:** Imperativo tecnológico; Tecnologias digitais na infância; Educação Infantil; Ensino Fundamental; Política Nacional de Educação Digital.

**RESUMEM:**

Este artículo pretende caracterizar el imperativo tecnológico en la infancia, basándose principalmente en documentos que determinan las tecnologías digitales para la Educación Infantil y la Educación Primaria. En este sentido, se observa la tendencia hacia prácticas educativas escolares cada vez más asociadas a las tecnologías digitales. La investigación tiene carácter exploratorio y crítico, con selección y análisis de documentos legales sobre educación. Se concluyó que el imperativo tecnológico está constituido por un énfasis en los recursos pedagógicos, la adquisición de equipos, el acceso a la red informática, con una base pedagógica instrumentalista, centrada en las tecnologías digitales como objeto de uso y enseñanza para el desarrollo de competencias. Se percibió que los intereses de los propietarios fuerzan transformaciones en las prácticas educativas para mantener las tasas de ganancia del capital, enfatizando las tecnologías digitales, y que el imperativo tecnológico desarrolla un tipo de formación para el trabajo simple, de forma acrítica, causando daños a la salud física, mental y social del alumno.

**PALABRAS CLAVE:** Imperativo tecnológico; Tecnologías digitales en la infancia; Educación Infantil; Educación elemental; Política Nacional de Educación Digital.