

**DIGITAL LEARNING AND THE WILL TO LEARN: A CRITICAL DIALOGUE
BETWEEN TRADITION AND CONTEMPORARY PEDAGOGY**

***APRENDIZAGEM NA ERA DIGITAL E EDUCAÇÃO DA VONTADE: UM DIÁLOGO
CRÍTICO ENTRE TRADIÇÃO E PEDAGOGIA CONTEMPORÂNEA***

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DIÁLOGO CRÍTICO ENTRE LA TRADICIÓN Y LA PEDAGOGÍA CONTEMPORÂNEA***



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ABSTRACT: This study critically examines the relationships between the education of the will, contemporary pedagogical approaches, and the growing incorporation of Information and Communication Technologies (ICT) into educational processes. It is a qualitative, bibliographic, and analytical-interpretative study grounded in references from philosophy of education, cognitive psychology, neuroscience, and educational technology literature. The analysis shows that, although contemporary authors attribute to ICT the potential to foster active, collaborative, and personalized learning, the development of dispositions such as sustained attention, perseverance, and self-control receives less emphasis in this debate. The study concludes that linking the tradition of education of the will with discussions on digital technologies may broaden the understanding of the cognitive and anthropological conditions required for learning and contribute to a more critical integration of ICT in school contexts.

KEYWORDS: Education of the will. Digital Information and Communication Technologies. Learning.

RESUMO: Este estudo analisa criticamente as relações entre a educação da vontade, determinadas correntes da pedagogia contemporânea e a crescente incorporação das Tecnologias Digitais de Informação e Comunicação (TDIC) aos processos educativos. Trata-se de pesquisa qualitativa, de natureza bibliográfica e caráter analítico-interpretativo, fundamentada em referenciais da filosofia da educação, da psicologia cognitiva, da neurociência e da literatura sobre tecnologias educacionais. A análise evidenciou que, embora autores contemporâneos atribuam às TDIC potencial para ampliar a aprendizagem ativa, colaborativa e personalizada, a formação de disposições como atenção sustentada, perseverança e autocontrole ocupa posição menos destacada nesse debate. Conclui-se que a aproximação entre a tradição da educação da vontade e as discussões sobre tecnologias digitais pode ampliar a compreensão das condições cognitivas e antropológicas necessárias à aprendizagem e contribuir para uma integração mais crítica das TDIC ao contexto escolar.

PALAVRAS-CHAVE: Educação da vontade. Tecnologias Digitais de Informação e Comunicação. Aprendizagem.

RESUMEN: Este estudio analiza críticamente las relaciones entre la educación de la voluntad, determinadas corrientes de la pedagogía contemporánea y la creciente incorporación de las Tecnologías Digitales de la Información y la Comunicación (TDIC) en los procesos educativos. Se trata de una investigación cualitativa, de naturaleza bibliográfica y carácter analítico-interpretativo, fundamentada en referencias de la filosofía de la educación, la psicología cognitiva, la neurociencia y la literatura sobre tecnologías educativas. El análisis evidenció que, aunque los autores contemporáneos atribuyen a las TDIC el potencial de promover un aprendizaje activo, colaborativo y personalizado, la formación de disposiciones como la atención sostenida, la perseverancia y el autocontrol ocupa un lugar menos destacado en este debate. Se concluye que la articulación entre la tradición de la educación de la voluntad y las discusiones sobre tecnologías digitales puede ampliar la comprensión de las condiciones cognitivas y antropológicas necesarias para el aprendizaje e impulsar una integración más crítica de las TDIC en el contexto escolar.

PALABRAS CLAVE: Educación de la voluntad. Tecnologías Digitales de Información y Comunicación. Aprendizaje.

Introduction

According to data from the world's largest study on education, the Program for International Student Assessment (PISA), released by the Ministry of Education (MEC) itself on its website (Brasil, 2020), Brazil has low proficiency in reading, mathematics, and science compared to the other 78 countries that participated in the assessment. According to PISA data, about 50% of Brazilians did not reach the minimum proficiency level that all young people should achieve by the end of high school, and 43% of students scored below the minimum proficiency level in all three domains.

[...] these students are only able to identify the main idea in a text of moderate length, find information based on explicit, though sometimes complex, criteria, and reflect on the purpose and form of texts when explicitly instructed to do so (Brasil, 2020, our translation).

According to data from the Brazilian Functional Illiteracy Indicator (INAF), conducted by Ação Educativa and the Paulo Montenegro Institute, three out of every ten Brazilians are functionally illiterate (Lima; Catelli Jr., 2018). This means that three out of every ten Brazilians have limited ability to read, interpret texts, and perform mathematical operations in everyday situations, that is, they struggle with basic functional skills used in everyday contexts.

This situation, however, is not unique to Brazil. Michel Desmurget, in his disconcerting work *A fábrica de cretinos digitais* (2021), notes that, for the first time in the history of intelligence tests and research, a generation has an IQ lower than that of its parents; a phenomenon that, according to the author's research and observations, is likely related to the amount of screen time experienced by our current digital generation.

As demonstrated by the indicators from PISA, the international study mentioned above, the widespread process of social and educational digitization in which we are immersed may not be viewed as a positive factor in educational metrics: although it is evident that digital skills have improved, there has been no positive impact on students' academic performance in the studies conducted.

Although such indicators reveal structural difficulties in contemporary educational systems, it is well known that their interpretation cannot be reduced to isolated factors, such as the use of digital technologies. On the contrary, the current educational landscape is marked by broader transformations related to digital culture, new forms of knowledge organization, and pedagogical approaches centered on active learning.

Hannah Arendt (2016, p. 221) had already warned that “the general crisis afflicting the modern world, one that affects nearly all areas of human life, manifests itself differently in various countries, extends to diverse domains, and takes on different forms, is the periodic crisis of education,” which, in her view, naturally stemmed from “a constant decline in basic standards throughout the entire school system” (Arendt, 2016, p. 221, our translation) coupled with “the almost universal functionalization of all concepts and ideas” in the sciences (Arendt, 2016, p. 139, our translation).

For Arendt (2016), this crisis is political in its origin and nature, and stems from a political movement to undermine the world’s traditional authorities. But the most significant symptom of the crisis—indicating its depth and seriousness, according to the author—is precisely that it has spread into pre-political areas, such as child-rearing and formal education, where authority, in the broadest sense, has always been accepted as a natural necessity. Such a crisis, according to Arendt (2016), is the final, yet decisive, phase of a process that, over the centuries, has essentially undermined tradition and religion.

[...] with the loss of tradition, we have lost the thread that guided us safely through the vast realms of the past. Without a firmly anchored tradition, the entire dimension of the past has also been endangered. We are threatened with oblivion, one that would cause us to lose the sense of the depth of human existence, for depth cannot be attained by human beings except through remembrance (Arendt, 2016, p. 130-131, our translation).

Nuno Crato, Portugal’s Minister of Education and Science from 2011 to 2015, reinforces Arendt’s conception by detailing the characteristics of postmodern education: “the rejection of the critical rationalist tradition, the contempt for classical culture, the emphasis on spontaneity at the expense of intellectualism, and the devaluation of content and substantive knowledge” (Crato, 2020, p. 13, our translation) and the much-touted “student-centered teaching.”

Furthermore, according to Crato (2020), the dominant ideology in modern pedagogy associates “school for all” with an “inclusive” school, drawing on Marxist ideology to view the school as an oppressive instrument in the service of the ruling class. There is a growing proposal that schools adopt differentiated practices, valuing popular knowledge and non-literate cultures, thereby restricting and limiting students to their social universe; viewing disciplinary practices and authority as oppressive forces; and portraying indiscipline as a result of a lack of enjoyment or the teacher’s inability to make the subject appealing to students.

There is a growing trend in educational studies toward a certain rejection of curricular goals and content—and, consequently, of exams—as well as the idea of a new way of being a teacher, leading to the conclusion that knowledge cannot be transmitted but must be constructed by the student alone. This reveals the modern pedagogical tendency to foster a certain opposition to structured knowledge.

In short, as Crato (2020) aptly summarizes, the school, along with its methods and content, is thus held responsible for students' failure, their indiscipline and lack of interest, and for failing to adapt and reform itself to students' diverse emotional, social, and economic contexts, thereby becoming, in the eyes of the prevailing ideology, an instrument of "social oppression."

Inger Enkvist, a Swedish educator and writer who holds the chair in Spanish and Latin American literature at Lund University and is the author of *Repensar a educação* (2014) and *A boa e a má educação* (2020), through extensive research into various educational experiences, including an analysis of data on educational outcomes from various countries, concludes that the "new pedagogy," widespread in Western education, is characterized by placing the utmost emphasis on student freedom, which is complemented by a set of proposals associated with the world of technology. Such educational proposals downplay the role of the educator and are based on concepts such as "creative play" and "motivation," since "there is an insistence on the teacher's obligation to spark students' interest in learning rather than demanding effort on their part" (Enkvist, 2020, p. 30, our translation).

The use of computers and the internet, as well as the replacement of exams with school assignments and projects, are, according to these proposals, the key educational strategies for preparing today's students for a bright future.

Authors such as Papert and Harel (1991), Siemens (2004), and Moran (2015) argue that Digital Information and Communication Technologies (DICT) expand the possibilities for collaborative, personalized, and project-based learning, shifting the focus of teaching from the transmission of content to the active construction of knowledge by the student. This perspective aligns with contemporary conceptions of pedagogical autonomy, in which student agency occupies a central position in educational processes.

At the same time, critics of contemporary pedagogy, such as Enkvist (2020) and Crato (2020), argue that certain educational approaches tend to downplay the centrality of effort, content, and teacher authority, favoring a conception of learning that is heavily dependent on students' immediate motivation and methodological flexibility.

It is evident, therefore, that the current educational landscape is marked by broader transformations related to digital culture, new forms of knowledge organization, and pedagogical approaches centered on active learning. In light of this, a central theoretical question emerges: to what extent does contemporary literature on DICT and pedagogical innovation engage with the classical concept of the education of the will, understood as the cultivation of dispositions such as attention, perseverance, and intellectual self-control? The aim, therefore, is to investigate possible convergences and tensions between the modern notion of pedagogical autonomy and the tradition of volitional formation present in the philosophy of education.

These questions and my interest in the topic arose as a result of my own professional experience. As a teacher of vocational education, working with youth (high school level) and adults (post-secondary and higher education levels) in the Federal Network of Education, Science, and Technology, I encounter on a daily basis issues related to learning and behavior that are tied to the cultural and pedagogical context in which these young people and adults find themselves today.

Based on this issue, this study aims to analyze, through a literature review, how contemporary scholarship on digital technologies and learning relates to the tradition of the education of the will, exploring its anthropological, epistemological, and pedagogical assumptions.

Classical Education and the Education of the Will

The Education of the Will occupies a central position in various philosophical and religious traditions that have influenced the development of Western educational thought. Although formulated in distinct historical contexts, these traditions share the understanding that education is not limited to the acquisition of knowledge, but equally involves the cultivation of the intellectual and moral dispositions necessary to guide human action. In this context, learning means developing capacities such as attention, perseverance, prudence, and self-control, which are conceived as prerequisites for human flourishing and for life in society.

As C. S. Lewis (2017) explains, for the wise men of the past, the crucial problem of science and knowledge was to conform the soul to reality, and the solution found was self-discipline and virtue. In the words of Steve Turley (2018, p. 4, our translation):

For the classical man, the fundamental question was: “How can I bring my soul into harmony with the world around me so that I may be elevated to the divine life?” The answer was: through prayer, virtue, and knowledge. However, for modern man, the question is reversed: modern man is not interested in how to adapt his soul to reality. Instead, modern man asks: How can I shape the world to fit my own desires and ambitions?

As C. S. Lewis (2017), a writer, professor, and respected scholar of medieval and Renaissance literature, education and culture have sought, whether in the tradition of classical Greek thought, the Judeo-Christian tradition, or even the Eastern tradition, to adhere to an inherited moral system and to point the way that humanity should follow in accordance with its nature and the very order manifested in the universe.

As Lewis (2017) summarizes, the Greeks taught that the goal of education is to make us delight in and suffer from the things that should cause us delight or suffering; thus, students, from an early age, should be trained in “ordered affections” or “just sentiments.” The ancients always believed that education should direct the human will toward virtues, for the sake of man’s inner development. As the great Greek philosophers Platão (2021) and Aristóteles (2015)—whose wisdom continues to illuminate human knowledge to this day—believed, young people needed to be trained in ordered affections and just sentiments so that, when faced with life’s choices, they would be able to recognize the good and choose it freely.

Platão (2021), in his famous Allegory of the Cave, presents his idea of education as the vision and knowledge of the Good, which, according to the philosopher:

[...] once beheld, one understands that it is, for everyone, the source of all that is just and beautiful; that in the visible world, it was it which created light, over which it reigns; and that in the intelligible world, it is the mistress of truth and intelligence, and that one must see it in order to live a sensible life in one’s private and personal affairs (Platão, 2021, p. 319, our translation).

Education, the philosopher continues, would be to enable the student to contemplate this light, training them to be in the correct position to contemplate it and to sustain that contemplation, providing them with the means to do so (Platão, 2021).

In his *Ética a Nicômaco* (2015), Aristóteles, in turn, posits that every art and activity is directed toward a good, and that, among all possible goods, there is a supreme one. For the philosopher, the supreme good is happiness—not in the sense of selfish pleasure, but the happiness that entails “living well and acting well” (Aristóteles, 2015, p. 19, our translation);

that is, the kind of happiness that leads the soul to a stability possessed only by those who dedicate themselves to virtue.

The Stagirite philosopher teaches, however, that virtue is not given to us by nature, but, being an activity, “it is by doing that we learn them [...], it is by practicing just actions that we become just” (Aristóteles, 2015, p. 42, our translation).

With regard to intellectual life and learning, we could equate the student’s well-being with what he needs to acquire the disposition to learn, such as effort, discipline, and order, and an understanding of the good fruits that result from them, so as to desire and choose them with detachment.

Lewis (2017, p. 23, our translation) also points out that: for ancient Hinduism, a person’s good conduct consisted of conformity to the pattern of nature and the supernatural revealed in the cosmic order and in moral virtues; the Chinese also spoke of something grand called the “Tao,” which represented the path along which the universe moves and which every person must follow; Saint Augustine, representing the Christian tradition, likewise linked education to the attainment of virtue, which is the “ordering of the affections” of human beings.

As the author notes, one can discern, in all these conceptions of the world and of education, the “doctrine of objective value” (Lewis, 2017, p. 24, our translation), that is, the perception that certain attitudes are truly true and others truly false in relation to what the universe is and what we are.

More recent authors, such as Payot (2018) and Enkvist (2014), have continued to attribute a foundational role to the education of the will in the development of intellectual maturity. For these authors, the development of personal autonomy does not stem from the absence of demands, but from the gradual formation of habits capable of sustaining the prolonged effort, responsibility, and discipline necessary for intellectual work.

Indeed, the education of a people must not neglect its moral dimension and necessarily involves the education of the student’s will itself. As Inger Enkvist (2014) further warns, the bond between the individual, the family, and society is such that, if we do not support the maturity of citizens, we endanger democracy itself. Along the same lines, Richard Weaver (2016) asserts that the decline of education brings about anarchic consequences that threaten the minimal consensus of values necessary for the maintenance of the state; education and schools do, in fact, hold a sacred (untouchable) role in the social and moral formation of a society.

As Jules Payot concluded in his work *A Educação da Vontade* (2018):

The cause of nearly all our failures, of nearly all our ills, is but one: weakness of will. It is our aversion to effort, especially prolonged effort. Our passivity, our frivolity, our dissipation, these are all other names for that underlying universal laziness that is to human nature what weight is to matter (Payot, 2018, p. 23, our translation).

In fact, from an early age we seem to struggle against the law of effort. Children demonstrate from an early age what Jules Payot (2018, p. 17, our translation) calls “the spectacle of anarchy of inclinations.” It does not take much argumentative effort to justify the author’s assertion. If children were born ready and no effort were needed, even in adulthood, to fight against bad inclinations and habits, we would live in an ideal world.

In line with classical thought, the educator’s task must, in fact, be to strengthen and shape the student’s will to achieve noble goals, beyond material, sensory, utilitarian, economic, or emotional aspirations, which are always relative, variable, and unstable. Enkvist (2014), supported by the results of studies conducted by the American Overstreet, states that the goal of education should be to develop a mature adult capable of leading their own life and that of their family in a productive manner. This means nothing more than educating the student’s will and helping them develop self-control.

What was once a mysterious force, acknowledged through observation over millennia, is now explained to us in detail by neuroscience, through brain-mapping technologies and the study of the brain’s physiology of learning: we now know that attention allows us to make neural connections that build new brain circuits, which are nothing more than the pathways of learning in our brain.

It is also known that self-control—the ability to resist temptation in order to do what is right, a capacity that helps children pay attention, act less impulsively, and maintain concentration—is a cognitive skill that takes time to develop and consolidate, and this is explained, in part, by the slow maturation of the prefrontal cortex. It is also known that this executive function is linked to various positive aspects of human life, such as competence in the social, emotional, and academic domains. In fact, as Morton (2013, p. 5, our translation) explains, self-control “predicts success in the early years of schooling more than intelligence does, and it also predicts health, economic prosperity, and a low incidence of criminal behavior later in life.”

With regard to intellectual life and learning, we can therefore see the importance of developing the ability to exercise self-control—or, in other words, directing the will toward a

goal worthy of human life. This ability can be considered a fundamental element of education and learning.

It is this ability that allows us to fully achieve worthy goals and ends, despite suffering, and thus attain true freedom—that is, the freedom to be in control of oneself, to master noble sentiments and moral ideas over vague and animalistic impulses.

Education, now more than ever, must bring to light the concept of freedom—a concept so obscured and distorted in our times by theories that lead us to confuse freedom with free will, or with the possibility of drifting aimlessly, at the mercy of feelings and emotions. As Jules Payot (2018) wisely defined it:

Moral freedom, like political freedom, like everything of value in this world, must be won through great struggle and ceaselessly preserved. It is the reward of the strong, the skilled, and the persevering. Only those who deserve to be free are free. Freedom is neither a right nor a given; it is a reward, the highest reward, the one most fruitful in happiness. It is, for all of life's events, what sunlight is to a landscape. And those who do not win it will be denied all of life's profound and lasting joys. [...] It is clear that by freedom we mean self-mastery, the dominance that noble sentiments and moral ideas hold over our animal impulses (Payot, 2018, p. 43, our translation).

Although written in the late 19th century, Payot's (2018) analysis is still frequently cited by contemporary authors who investigate the processes of self-regulation in learning. His central concern lies not in the transmission of content itself, but in the subjective conditions that make sustained study possible, especially the ability to resist distractions, manage time, and persevere in the face of the difficulties inherent in intellectual work.

Responsibility and its practice, in fact, carry great weight in the realm of learning. Responsibility, that is, fulfilling what needs to be done, whether imposed by oneself or by other, is also a necessary attribute for developing the self-control required for sustained attention. And how can one develop responsibility without demands and the imposition of obligations? If one is not required to perform tasks, it is not possible to learn responsibility. Therefore, “expectations are not only a factor in intellectual development but also a part of learning good social and work habits” (Enkvist, 2014, p. 74, our translation). The development of responsibility, and, consequently, of self-control, stems from the establishment of expectations in a person's personal life.

Shedding light on the concept of responsibility and its important role in breaking the cycle of harmful behavior, Anna Lembke (2022, p. 175, our translation) draws on her research and insights from neuroscience to assert that “empathy without accountability is a half-hearted

attempt to alleviate suffering.” If we reinforce a student’s victimhood, therefore, there is a good chance that they will remain a victim. Conversely, encouraging students to take responsibility enables them to become empowered individuals—or, in other words, to develop self-control. Accountability is, therefore, a way to help others move forward with their lives and duties in a positive manner (Lembke, 2022).

After all, education must also follow a moral path, one that reminds us that our destiny is to engage with the world and not to end our journey with merely a handful of sensory impressions. As Richard Weaver (2016, p. 36, our translation) states, the principle of self-control is thus a victory of transcendence. When a person chooses to pursue something that is arbitrary to them on the level of ideas, that is, when they exercise self-control, they are accomplishing an “abstract feat” (Weaver, 2016, p. 36, our translation). He is recognizing the numen, managing to see things from the perspective of eternity, and this makes him an orderly man, who will be far more capable of not degenerating in the face of life’s adversities and of not yielding to its pressures (Weaver, 2016).

When we bring together these different ancient traditions, we observe a remarkable convergence regarding the purpose of education. Despite the historical, cultural, and religious differences among the authors considered, they all share the understanding that learning consists of more than simply acquiring information or developing instrumental skills. Education also presupposes the formation of intellectual and moral habits that enable the individual to rationally guide their actions, persevere in the face of difficulties, and order their desires in accordance with ends considered true and good.

It is within this context that the concept of the Education of the Will is situated. Far from being limited to the exercise of willpower in a psychological sense, the term refers to a formative process aimed at the progressive development of self-control, intellectual discipline, sustained attention, responsibility, and the ability to subordinate immediate impulses to higher goals. From this perspective, the will is not an isolated faculty, but is interconnected with intelligence, emotions, and the habits acquired throughout one’s human development.

In summary, the classical tradition of education converges on the understanding that learning requires not only cognitive abilities but also moral and volitional dispositions that must be developed throughout the educational process. This conception remains present in the work of various contemporary authors dedicated to the study of learning, although often under different terms, such as self-regulation, executive functions, self-control, or intellectual discipline. The question that arises, therefore, is not whether such dispositions remain relevant

to contemporary education, but to what extent certain pedagogical approaches and the growing prominence of digital technologies facilitate or hinder their development. It is precisely this issue that will be examined in the following section.

Modern Education, the digitization of teaching, and the Education of the Will

The rapid development of Digital Information and Communication Technologies (DICT) has significantly changed the ways in which information is produced, accessed, and shared, directly impacting the educational theories formulated in recent decades. In this context, a body of literature has emerged that attributes to digital technologies not only the role of teaching aids but also the potential to bring about structural changes in learning, in school organization, and in the very roles played by teachers and students.

Marc Prensky (2001) became one of the most influential authors in this debate by proposing a distinction between “digital natives” and “digital immigrants.” According to the author, individuals born into a world of digital technologies develop distinct ways of processing information, communicating, and learning, rendering certain methodologies traditionally employed by schools progressively inadequate (Prensky, 2001).

The “digital natives” hypothesis has had a profound influence on the educational debate by reinforcing the perception that technological changes would necessarily require changes in teaching practices as well. From this perspective, schools should embrace the languages, resources, and forms of interaction characteristic of digital culture, fostering greater student participation and more dynamic methodologies.

Another major figure in “digital pedagogy”, if we may call it that, is the educator Seymour Papert, whose constructivist theory represents one of the first attempts to systematically integrate computational resources into educational processes. According to Papert and Harel (1991), the computer ceases to be merely an instrument and becomes an “object-to-think-with”, that is, an intellectual tool capable of fostering experimentation, creativity, and problem-solving. Computers become important not simply because they teach, but because they enable “learning by doing.”

According to Papert and Harel (1991), simply introducing computers into schools does not produce significant changes when traditional teaching structures remain intact. The use of digital technologies becomes pedagogically relevant when it alters the very nature of the

learning process, shifting the balance between the transfer of knowledge to students and the production of knowledge by the students themselves.

Papert and Harel (1991) highlight a shift in emphasis from the transmission of knowledge to its active construction by students. Thus, according to the authors, the computer would enable an epistemological shift in the very concept of learning, since, in their view, it represents a profound change in the conception of knowledge and in the ways knowledge is produced (Papert; Harel, 1991). Learning would occur through project-based work, problem-solving, and the construction of artifacts imbued with personal meaning; for this reason, Papert and Harel (1991) summarize constructivism as an approach based on the idea of “learning-by-making,” that is, learning through construction.

George Siemens (2004), in turn, the leading proponent of connectivist learning theory, proposes that learning itself can reside in non-human devices, thereby demonstrating a shift in the theoretical paradigm regarding learning. That is, how and where you access and connect with information becomes more significant than the content and knowledge themselves. Siemens (2004), therefore, shifts the focus from possessing knowledge to connecting to knowledge.

While Papert and Harel (1991) sought to redefine learning based on the active construction of knowledge, George Siemens (2004) seeks to respond to the transformations brought about by networked society through the formulation of connectivism. His proposal is based on the observation that the main classical theories of learning—behaviorism, cognitivism, and constructivism—were developed during a historical period prior to the impact of digital technologies on social life.

Accordingly, Siemens (2004) argues that contemporary learning can no longer be understood exclusively as a process internal to the individual. Knowledge is now distributed among people, organizations, databases, and technological systems, so that the ability to establish connections becomes more important than the mere accumulation of information.

Siemens (2004) seeks to emphasize that, in a context marked by the rapid obsolescence of information, it becomes more important to develop skills for locating, selecting, and connecting knowledge than to memorize relatively stable content.

According to connectivist learning theory, connectivity becomes a constitutive element of the learning process itself, partially shifting the focus from the individual acquisition of knowledge to the ability to participate in collaborative information ecosystems. The internet is said to facilitate the integration of different skills, enabling groups to solve problems

collaboratively and generate knowledge that would be difficult for individuals to attain on their own. Learning is no longer confined to the student within the school setting but now takes place in multiple environments distributed across digital networks.

In the Brazilian context, José Manuel Moran (2015) is among the leading authors advocating for the integration of Digital Information and Communication Technologies into educational processes. According to Moran (2015), digital technologies promote the personalization of learning, allowing students to progress at different paces, use multiple sources of information, and participate more actively in the construction of knowledge. The teacher remains an essential figure in the educational process, but their role has shifted from primarily transmitting content to mediating learning experiences, organizing educational pathways, and monitoring student development.

His work is based on the assumption that the profound cultural transformations resulting from the digital society also require changes in the ways we teach and learn, such that simply incorporating technologies into traditional practices would not be sufficient to promote more meaningful learning. From his perspective, educational innovation depends on the simultaneous reorganization of methodologies, curricula, learning spaces, and the very roles played by teachers and students.

According to Moran (2015, p. 17, our translation), digital technologies are a prime means of fostering more flexible and personalized learning paths, and “if we want students to be proactive, we need to adopt methodologies in which students engage in increasingly complex activities, in which they have to make decisions and evaluate the results.”

This understanding shifts the focus of the educational process toward the creation of learning experiences. The teacher remains an indispensable figure, but their role primarily involves mediation, curation, guidance, and monitoring of learning pathways. Learning is now conceived as an active process in which students participate in inquiry, problem-solving, the collaborative production of knowledge, and reflection on their own learning.

This formulation aligns with Papert and Harel (1991) in emphasizing active learning and student-driven knowledge construction, and it resonates with Siemens (2004) in recognizing that digital environments expand the possibilities for access, interaction, and the collaborative production of knowledge.

Among the contemporary authors cited, it is evident that, although they bring together distinct theoretical perspectives, there is relative convergence regarding the understanding that traditional teaching models, characterized by a focus on oral presentation, rigid disciplinary

organization, and the systematic transmission of content, fail to adequately meet the cognitive, social, and cultural demands of contemporary society. Instead, several authors propose forms of learning that are more collaborative, flexible, personalized, and strongly supported by digital technologies.

Despite the differences among these theoretical currents, there is significant convergence around certain fundamental assumptions. Broadly speaking, these authors recognize that digital technologies expand access to information, foster collaborative forms of learning, allow for greater personalization of educational pathways, and help redefine the teacher's role as a mediator of educational processes.

However, although these contributions have significantly broadened the debate on pedagogical innovation and digital culture, it is evident that their main points of reference focus predominantly on the reorganization of teaching methodologies, connectivity, and the expansion of opportunities for access to knowledge. By comparison, they devote less attention to fostering the inner dispositions necessary for the very act of learning itself, such as sustained attention, perseverance, self-control, and the cultivation of willpower. This observation does not invalidate the contributions of these schools of thought, but it does point to the need to broaden the debate beyond the instrumental potential of digital technologies, incorporating a more explicit reflection on the anthropological conditions of learning.

The authors cited are not only in favor of the use of DICTs in the educational context but are also strong advocates for them. They ultimately represent anthropologies of learning that differ from the age-old anthropology—focused on human beings and their internal processes—to which we referred earlier.

While tradition leads us to ask how to cultivate a will capable of sustaining study, contemporary authors, in line with digital pedagogies, seem to be focused on questions such as: “How can we transform the nature of learning?” or “What does it mean to learn when knowledge is distributed across networks?”

The literature reviewed shows that different schools of thought in contemporary pedagogy attribute significant potential to Digital Information and Communication Technologies (DICT) for promoting more collaborative, personalized, and active forms of learning, but devote little attention to the internal dispositions necessary for learning to actually take place.

This is precisely the focus of the present analysis. The goal is not to deny the contributions of DICTs to educational processes, but to investigate a dimension that has been

less explored in contemporary literature: the possible implications of increasing technological mediation for the development of sustained attention, perseverance, self-control, and the cultivation of willpower.

Anna Lembke (2022), a psychiatrist and professor of addiction medicine at Stanford University, has drawn on neuroscience to warn of the dangers of excessive technology use, arguing that we have become a generation addicted to pleasure. In Lembke's (2022) words:

We have transformed the world from a place of scarcity into a place of immense abundance: drugs, food, news, games, shopping, gambling, text messages, sex, Facebook, Instagram, YouTube, Twitter. The growing numbers, the vast variety, and the immense potential for highly rewarding stimuli are staggering. The smartphone is the hypodermic needle of modern times, providing a constant supply of digital dopamine to a generation that's always plugged in. [...] The technology itself is addictive, with its pulsing lights, its musical fanfare, its unlimited content, and the promise, with continued engagement, of ever-greater rewards. [...] The act of consumption itself has become a drug (Lembke, 2022, p. 9-30, our translation).

As Richard Weaver (2016) rightly observes, the more a person has to become addicted to, the less inclined he is toward the discipline of work, whether intellectual or mechanical: this can be considered an immutable law of human nature. The modern world, therefore, with its material and immaterial excesses of every kind, distances man ever further from the necessity of work and inner contemplation, making him an ever-easier prey to idleness, distraction, and the need for entertainment.

It is well known that intellectual work and learning require hard work, the arduous effort of sustained attention. Attention, as Jules Payot (2018) would say, is the very tool of learning. To learn is to be attentive, and, unfortunately, attention is not a fixed, stable, or lasting state. On the contrary, it is easily diverted by any external stimulus. For this attention to be sustained and to become stronger and more persistent, it requires the support of the will.

If an idea or piece of information merely passes through us without taking root, it is as if it had never existed or been conceived at all; we will soon have forgotten it. We must hold the idea in our consciousness for a long time and return to it often in order to make connections that solidify our learning. Maintaining focused and persistent attention allows the idea to:

[acquire] the vitality necessary to draw to yourself that mysterious force of attraction that fosters the association of ideas, fruitful thoughts, and powerful feelings, so that you may incorporate them. This work of organizing ideas and feelings takes place slowly, through calm and patient meditation. [...] It is in

this sense that every discovery is an act of will (Payot, 2018, p. 36, our translation).

The concept of sustained attention seems to be falling by the wayside amid the allure of the digital world.

As early as 1893, Jules Payot was already warning about changes in modern educational systems:

Podemos dizer, infelizmente, que o nosso sistema de ensino tende a agravar essa preguiça intelectual fundamental. Os programas de ensino secundário parecem destinados a fazer de todo aluno um disperso. Obrigam esses infelizes adolescentes a adejar sobre todas as coisas e proíbem-nos, pela variedade de matérias a absorver, de penetrar com profundidade em qualquer assunto. [...] ele tende a matar no aluno todo espírito de iniciativa e todo desejo de lealdade no trabalho. [...] Acrescente a isso o fato de que as condições da vida moderna tendem a reduzir a nossa vida interior, que elas levam a dispersão do espírito a um grau que dificilmente poderá ser ultrapassado. A facilidade das comunicações [...] dissipam nosso pensamento. Não se tem tempo nem mesmo para ler. Vive-se uma vida tão agitada quanto vazia (Payot, 2018, p. 31, our translation).

In this context, the question arises: when traditional and “digital” learning theories refer to learner autonomy, are they referring to the same concept? Does technology foster or hinder the development of willpower? And finally, shouldn’t education prepare people for the law of effort that precedes any great human achievement?

Digital pedagogy does indeed seem to be based on a philosophical anthropology quite different from the millennia-old anthropology that shaped Western education. However, as the philosopher Alasdair MacIntyre (2021) explains, without a teleological framework, the project of modern morality becomes unintelligible:

The use of man as a functional concept is much older than Aristotle [...]. It dates back to the forms of social life to which theorists of the classical tradition give expression, for, according to that tradition, to be human is to fulfill a series of roles, each with its own distinctive trait and purpose: member of a family, citizen, soldier, philosopher, servant of God. [...] Within this tradition, moral or evaluative statements can be said to be true or false, just as one can say of other factual statements. Once, however, the notion of essential human functions and purposes disappears from morality, it begins to seem implausible to treat moral judgments as factual statements (MacIntyre, 2021, p. 103-104, our translation).

In fact, as the philosopher Alasdair MacIntyre defines it in his work *After Virtue* (2021), “emotivism,” as a tendency to reduce morality to personal preference, has come to represent, in this context, the prevailing ideology in our modern world. According to the author, this moral philosophy has become embedded in our culture through concepts, ideas, and attitudes that—even if not formulated at a self-conscious theoretical level—represent a common practice in our society. Emotivism would be a final verdict on all moral philosophy presented throughout the millennia of human history, causing us to view the past as a burden. In the author’s words:

What emotivism asserts is, in essence, that there is no valid rational justification, nor can there be, for any claim that objective and impersonal moral criteria exist, and that, therefore, such criteria do not exist. [...] Emotivism, therefore, is based on the claim that every attempt, whether in the past or present, to provide a rational justification for objective morality has effectively failed (MacIntyre, 2021, p. 49, our translation).

The interpretation proposed by MacIntyre (2021) helps us understand that shifts in philosophical conceptions of human nature tend to have repercussions on educational theories as well. If different moral conceptions presuppose distinct understandings of human beings and their purposes, then the changes introduced by modernity are not confined to the abstract realm of philosophy but also extend to the objectives attributed to education, knowledge, and moral formation.

Furthermore, from the perspective of philosopher Richard Weaver (2016), the break with the classical perception of morality and human nature signified the “self” attaining its rightful “autonomy”: humans find fewer and fewer grounds for authority in the world, while at the same time positioning themselves as the central authority of the universe.

In other words, man comes to view himself as sovereign in his moral authority, and the world, devoid of meaning and purpose, comes to be guided by his material desires: the grand stage of history is reduced to the economic endeavors of individuals and classes (Weaver, 2016), and personal feelings and aesthetic satisfactions become humanity’s greatest assets (MacIntyre, 2021).

The modern world, with its theories and conceptions, consequently tends to stem from this centrality of man and his desires in relation to the world, which has implications for the educational vision of our time. As is well known, philosophy is not merely a theory but necessarily presupposes assertions that are incorporated into society in a practical way. As Alasdair MacIntyre (2021) clearly explains, a moral philosophy typically presupposes a

sociology, because every moral philosophy proposes—explicitly or implicitly—a conceptual analysis of the relationship between an agent and their reasons, intentions, and actions, and presupposes that these concepts are or can be embodied in the society in which one lives. In the author’s own words:

There cannot be two histories, one of moral and political action, and another of moral and political theory, since there are not two pasts: one inhabited solely by actions, and the other solely by theories. Every action carries with it and manifests beliefs and conceptions that are more or less imbued with theory; every theory and every manifestation of belief is a moral and political action. Therefore, the transition to Modernity took place both on the level of theory and on that of practice and was, in reality, a single transition (MacIntyre, 2021, p. 106, our translation).

From the perspective of knowledge, it is clear that, in modern times, the value of education has come to be measured in proportion to its socioeconomic utility and the learner’s personal feelings.

Inger Enkvist, in her book *Repensar a educação* (2014), argues that modern pedagogy, also referred to by some as “new pedagogy” or “pedagogism”—a combination of constructivism and the sociology of education,—is now guided by the central theme of social differences among students and by their feelings toward education and learning. School programs and debates have come to revolve primarily around the discussion of equality among social classes, ethnic groups, cultures, religions, genders, and sexual orientations, as well as around active teaching methods and the integration of digital technology into education. Subjects, content, and the very qualitative approach to them have given way to the priority of creating pedagogical environments, fostering students’ creativity and spontaneity, and making the classroom a pleasant and fun environment.

By confining knowledge to a materialistic view and downplaying the transcendent dimension in education, the very sense of meaning and purpose loses ground in education and learning. According to Steve Turley (2019):

In a world devoid of any inherent meaning and purpose, everything ends up revolving around itself. The self, alone, provides the human person with their own meaning. And if that is the case, then anything offered in an educational curriculum must pass the test of the student’s sovereign ego. It is now up to the parent or teacher to convince students that their class, book, or subject is worthy of their time and attention. Nothing possesses intrinsic meaning or value (Turley, 2019, p. 28, our translation).

Indeed, “amputating the transcendent from education” (Turley, 2019, p. 27, our translation), or even its teleological character, has serious consequences, such as the magnification of the “self” in educational culture. From the fascination with the “self” as a form of virtue in our culture stems a “narcissistic epidemic” and a “collective self-indulgence” in the educational sphere: the student’s right to self-actualization is proclaimed, commonly understood as a right to accuse anyone or anything that seeks to stifle the “self” of malice.

Enkvist (2014) describes this trend in modern education and pedagogy as a tendency toward “education geared toward immaturity,” where limits and responsibilities are ignored, desires are confused with rights, and the rejection, out of convenience, of humanity’s cultural heritage is fostered.

Furthermore, beyond this moral debate about the concept and purpose of education, recent literature suggests that “digital” pedagogy and the encouragement of intensive use of digital technologies may compromise attentional processes relevant to learning. This is because certain characteristics fostered by digital life can impair intellectual performance: distraction, multitasking, impulsivity, and impatience are enemies of learning.

There are genuine concerns regarding the negative impact of screens on the reduction of time spent on homework, the decline in linguistic expression and concentration skills, as well as on the duration and quality of sleep—an element that is essential to the learning process.

We need to analyze and discuss these facts and their repercussions in the educational context and on the learning process. Let’s see.

In fact, the digital world and ICT encourage students to multitask and to avoid the effort of learning details, leading them to use digital resources as an readily available source of information and to focus their learning increasingly on “know-how.”

Regarding the purported increase in multitasking ability, that is, the increased use of working memory among digital natives, it is worth noting that such an increase does not mean that people currently possess more knowledge or a broader vocabulary (Enkvist, 2020). In fact, the opposite is true: when, in education, we encourage students to rely on digital tools and the information available, rather than exercising their brains and internalizing knowledge through repetition and memorization, much is lost in the learning process.

This is because, as is well known, learning requires training based on genuine effort: practice, when it is too easy or done only very occasionally, has no effect. Furthermore, fragments of information do not constitute knowledge. Attempting to spare students the effort of learning the details amounts to an obstacle to learning itself, since data must be available in

the brain, in long-term memory, so that it can be used in the process of abstraction and the generalization of knowledge, which are necessary stages of the learning process (Enkvist, 2020).

Citing a comparative scientific study on the outcomes of using or not using computers in educational activities, Desmurget (2021) notes that, during the research, even when computers were used to carry out educational activities related to the classroom lesson, learning was impaired. Analyzing this data, the author concludes that a teaching tool that distracts students from the content being taught—such as DICTs—causes them to miss information and understand less of what was explained, which contradicts the myth surrounding digital education. The study demonstrated that students’ use of their computers for digital activities required in the classroom was largely directed toward recreational activities: in a 2-hour-and-45-minute class, students spent two-thirds of their time on recreational tasks, and in the analysis of a 1-hour-and-15-minute class, it was found that time spent on recreational activities accounted for 42% of class time (Desmurget, 2021).

The problem with distraction, therefore, is that it prevents any impression or skill from having time to take root. This problem takes on alarming proportions in modern life, especially in the digital context, which is surrounded by a vast array of stimuli, fleetingness, and frivolity. It is in this sense that Isaac Newton himself proclaimed that genius is nothing more than long patience, in order to sustain the will toward persevering attention and reap the fruits of one’s learning.

Furthermore, disadvantaged students lose the most when relying on DICTs. Studies show that only a small minority of more privileged students, with a solid educational foundation and intellectual maturity, are able to use educational technologies to their advantage (Desmurget, 2021).

It should be noted that, although digital screens theoretically contain all the information in the world, they also “contain all the absurdities of the universe, [...] and even supposedly serious websites cannot be considered absolutely reliable” (Desmurget, 2021, p. 130, our translation).

In this context, historian Yuval Harari’s reflection in his book *21 lições sobre o Século XXI* is particularly relevant, when he states that “in a world flooded with irrelevant information, clarity is power” (Harari, 2018, p. 11, our translation).

In short, the excess of information provided by the internet does not necessarily translate into knowledge for the majority of the population. In this context, one of the consequences of

low levels of functional literacy in Brazil and around the world is that people are—due to the excess of data and digital media—much more vulnerable to misinformation, especially memes and manipulated images used out of context, according to Christine Nyirjesy Bragale, vice president of communications at *The News Literacy Project* (Fajardo, 2018).

In fact, only a significant minority of the population is able to make the most of what digital resources have to offer in terms of learning and education—namely, those with a solid foundation of prior knowledge and greater self-discipline and motivation. Consequently, learning with digital programs is more limited than learning through traditional methodologies and with a qualified teacher (Desmurget, 2021).

This is because it is also impossible to achieve the “learning by doing” so often touted in modern pedagogy without prior, well-established knowledge. And knowledge depends on language. Jules Payot (2018) highlights the importance of language in the educational process:

We think with words. [...] To think, we must free ourselves from real images, for they are heavy, dense, and difficult to handle. We replace them with brief signs that are easy to retain and easy to convey to others; these signs are generally words. These words, associated with things, have the ability to evoke those things whenever we wish [...] (Payot, 2018, p. 123, our translation).

Enkvist (2020) also points out that language is the central pillar of our social life and that vocabulary is the most important individual factor in understanding a text. Therefore, reading and writing, and the intellectual culture conveyed through language, are “foreign languages” that we cannot neglect in education.

In turn, by prioritizing spoken language, or even superficial and rapid written language, modern pedagogy and the widespread use of DICT contribute to a lack of interest in language and hinder language development.

Modern education emphasizes the functional aspect of languages—as a tool for practical communication—rather than their role as vehicles of culture, history, and knowledge, precisely because the study of language and literature does not come naturally and does not reveal itself immediately; it requires effort (Enkvist, 2020). It is worth noting that texts in schoolbooks and teaching manuals are becoming increasingly brief, as are texts from digital contexts, where many images and fewer words are used. Furthermore, the focus on school projects and assignments using digital resources and social media means that school texts now tend to have shorter, more objective content, concentrating on describing a task and thus losing the rich

cultural, travel, adventure, and wonder that literature typically offers. Reading has become practical and has lost its intellectual and aesthetic focus (Enkvist, 2020).

Although language is so widely discussed and used today in an instrumental way, it is clear that even as a tool, language has not been used effectively; data on the high rate of functional illiteracy confirm this reality: three out of every ten Brazilians are functionally illiterate in our country (Lima; Catelli Jr., 2018). Even students who have completed their schooling have difficulty writing coherently and interpreting texts.

Literary language and literature require knowledge of excellent and rigorous language use, as well as certain cultural references. As the saying goes, all knowledge depends on language (“word knowledge is world knowledge”). This knowledge, in turn, requires systematic study to structure the student’s thinking and make room for the acquisition of other types of knowledge. As Inger Enkvist (2020) explains:

To become a good reader, it is essential to internalize linguistic knowledge because, with a few quick mental connections, less effort is required, leaving more capacity to pay attention to the text’s meaning... [To this end], the importance of knowing how to concentrate and direct one’s attention to the task at hand stands out. [...] Only a small portion of the information we use to understand a text is explicitly stated in the text itself. The rest of the information comes from our long-term memory, which is why it’s important to build it up (Enkvist, 2020, p. 196-198, our translation).

In other words, much of our knowledge of spelling comes from reading, because reading leaves us with a mental image of the words. Furthermore, writing is only possible by accessing long-term memory to find the appropriate words and plan what to write (Enkvist, 2020).

Catherine L’Ecuyer, in her book *Educar na realidade* (2018), presents several scientific studies that highlight the importance of non-digital reading and writing for learning, concluding that, whether we like it or not, technology affects our learning:

A study that observed 7-year-old children learning to read compared what they learned by writing by hand to what they learned simply by looking at letters. The study reports that motor skills—writing by hand—are key to learning to read. This study confirms another that concludes that the specific movements involved in handwriting allow for better visual recognition of letters than typing on a keyboard. Another study concludes that taking notes on a keyboard is less effective for learning than taking notes by hand, even in the absence of distractions and when isolating the effect of “multitasking.” A recent study reports that comprehension is poorer after reading on a screen than after reading on paper (L’Ecuyer, 2018, p. 90, our translation).

Desmurget (2021), a French researcher specializing in cognitive neuroscience, explains—based on findings published in a PISA report, in the chapter on the influence of information and communication technologies on academic performance—that:

Despite considerable investments in computers, Internet connections, and educational software, there is little solid evidence that increased computer use by students leads to better scores in math and reading. [...] Countries that invested the least in introducing computers into schools progressed faster, on average, than countries that invested the most [...] Overall, even measures of technology use in classrooms and schools are often negatively associated with student performance. [...] For example, in countries where it is more common for students to use the Internet to do their homework at school, student performance in reading has, on average, declined. Similarly, math proficiency tends to be lower in countries/economies where the proportion of students using computers in math lessons is lower (Desmurget, 2021, p. 117, our translation).

The author goes on to quote Andreas Schleicher, director of the education division at the Organization for Economic Cooperation and Development (OECD):

Technology can do little to help bridge the skills gap between advantaged and disadvantaged students. Simply put, ensuring that every child achieves a basic level of proficiency in reading and math appears to be more effective in creating equal opportunities in a digital world than subsidizing or expanding access to high-tech devices and services (Desmurget, 2021, p. 118, our translation).

Therefore, there is concern about the possible marginalization of language and literature—and the resulting decline in educational quality—driven by a “know-how” pedagogy combined with the digitization of the school system.

Furthermore, regarding the cognitive and technological superiority of digital natives, it should also be noted that today’s digital tools are essentially “plug-and-play” tools. They require very little effort or specific skill and appeal to users through their ease of use, speed, fun, and entertainment value. They are designed so that anyone can use them easily, requiring little reasoning or cognitive effort for their use, as they are essentially intuitive.

As Desmurget (2021) points out, a recent report by the European Commission mentions the low level of digital competence among this so-called digital generation:

It is worth noting that, for the most part, these young people struggle to master even the most basic computer skills: setting up security settings on their computers; using common applications (word processors, spreadsheets, etc.);

editing a document; writing a simple program (in any language); configure security software; establish a remote connection; add memory to a computer [...]. And that's not the worst of it. In fact, in addition to their alarming technical inadequacies, the younger generations also face daunting difficulties in processing, selecting, organizing, evaluating, and synthesizing the vast amounts of data stored in the depths of the Web. [...] A sad observation corroborated by the findings of another wide-ranging study, published by researchers at Stanford University in the United States. According to them, "in general, young people's ability to reflect on information on the Internet can be summed up in one word: dismal." Our digital natives may be able to juggle Facebook and Twitter while simultaneously 'uploading' a selfie to Instagram and sending a text message to a friend, but when it comes to evaluating information parading through media channels, they quickly become lost (Desmurget, 2021, p. 24, our translation).

Desmurget's (2021) conclusion is supported by data from Brazil's INAF itself (Lima; Catelli Jr., 2018). INAF has been tracking illiteracy rates in Brazil in a time series since 2001, but in 2018 it provided information related to the digital context for the first time. According to the data, despite their difficulties, functionally illiterate individuals are frequent users of social media. Among them, 86% use WhatsApp, 72% are active on Facebook, and 31% have an Instagram account (Lima; Catelli Jr., 2018). In other words, functional illiteracy is not a barrier to using common digital tools, given their ease of use (Fajardo, 2018).

This observation is supported by the fact that technological devices, which are gaining popularity in the media and even in daily school life, are increasingly associated with entertainment and fun and are becoming ever more user-friendly. Therefore, a student who does not know how to use such tools and apps at the beginning of their school career will have no difficulty mastering them later on. On the other hand, the development of cognitive language skills, such as reading and writing, as well as concentration and attention skills, if not properly fostered during childhood and adolescence, will become difficult to achieve in adulthood due to the progressive closing of the "windows of brain development" recognized by modern neuroscience (Desmurget, 2021, p. 28, our translation).

It is also known that children who begin learning to read and write on a computer have much greater difficulty recognizing and memorizing letters, reading, and writing, and also have greater deficits in understanding and retaining classroom material than those who continue to learn using pencil and paper (Desmurget, 2021).

Nevertheless, we should not demonize "digital" learning. It is both legitimate and necessary for us to analyze what minimum digital skills each student should possess. It is also appropriate to rely on digital mediation for teaching non-digital subjects (Portuguese, mathematics, etc.). Even in this case, it is understood that learning "through" digital means is

possible in specific situations involving well-defined educational projects, developed by qualified professionals who use digital tools efficiently to support learning.

Final considerations

The critical study proposed here suggests that both traditional and digital pedagogies operate with different concepts of autonomy.

According to Moran (2015), autonomy is pedagogical and methodological: students participate more actively in the construction of knowledge, make decisions, develop projects, and learn in flexible environments.

For authors such as Payot (2018), Enkvist (2014, 2020), and in the classical tradition, autonomy is moral and volitional: it concerns the ability to govern oneself, maintain focus, resist distractions, and persevere in one's studies.

Although authors such as Papert and Harel (1991), Siemens (2004), and Moran (2015) attribute significant potential to digital technologies for expanding student autonomy, it is observed that the autonomy advocated by these authors is predominantly methodological in nature, referring to the student's active participation in the construction of knowledge and the expansion of their ability to learn in flexible and connected environments. The classical concept of the education of the will, in turn, concerns above all the development of the inner dispositions that enable one to sustain intellectual effort, control immediate impulses, and persevere in the face of the difficulties inherent in study. Although these two conceptions are not necessarily incompatible, they emphasize distinct dimensions of human development, an aspect that remains relatively unexplored in the literature on educational technologies.

This study sought to analyze, through an analytical-interpretive literature review, the relationships between the tradition of "education of the will," certain currents in contemporary pedagogy, and the growing incorporation of Digital Information and Communication Technologies into educational processes. The theoretical framework developed revealed that recent literature offers important insights into understanding the pedagogical potential of DICT, particularly with regard to expanding access to knowledge, developing active methodologies, and fostering collaborative learning.

An analysis of the literature supportive of digital technologies revealed that authors such as Papert and Harel (1991), Siemens (2004), and Moran (2015) place central emphasis on student autonomy, networked learning, and the reorganization of pedagogical practices in line

with the transformations of digital culture. These contributions represent a significant advance in contemporary educational thought and significantly expand the possibilities for pedagogical innovation.

At the same time, the literature review also indicated that some studies from cognitive psychology, neuroscience, and the philosophical tradition of education draw attention to a distinct dimension of learning: the development of the inner dispositions that underpin sustained study, including sustained attention, perseverance, self-control, and the ability to delay immediate rewards. Under various names—willpower training, self-regulation of learning, or executive functions—these abilities continue to be recognized as relevant to intellectual development.

In light of this dialogue, it is argued that the contemporary debate on educational innovation could benefit from a closer alignment between these two traditions. Rather than viewing digital technologies and willpower education as necessarily mutually exclusive perspectives, it seems more promising to investigate how different forms of integrating DICTs can foster—or, under certain circumstances, hinder—the development of the volitional capacities necessary for deep learning.

The question raised by Payot (2018, p. 31, our translation) in his 1893 work seems even more relevant today in the digital world in which we live: “How can we resist the distraction of the mind that our environment tends to produce, when nothing in our education prepares us for such resistance?” and “Is it not disheartening to think that the most crucial task, the education of the will, is nowhere undertaken directly and consciously?”

A pedagogy grounded in a deep understanding of human nature and how people learn must reclaim ethical and moral issues and strengthen an education focused on maturity and the consistent inner development of the individual.

Furthermore, schools must adopt a stance of prudence and responsibility regarding students’ use of technology in the classroom and when completing homework. The digital world presents us with a realm of overstimulation, distraction, and convenience, which often compete with learning and intellectual life.

Recognizing the importance of the moral element in education also involves recognizing the importance of the teacher’s role in the school. The value and richness of the human connection between student and teacher—through the encouragement, challenges, inspiration, and reflections fostered by this interaction, especially in its moral and emotional dimensions—must never be downplayed in the educational context.

If education has an indispensable moral element to its fulfillment, and this element can only be realized by a human being and vividly conveyed through human relationships, then teachers are and will always remain an essential instrument within education.

The warning issued by Dorothy Sayers (2009) in a speech delivered at the University of Oxford in 1947 seems more relevant and timely than ever:

For we allow our young people to go out unarmed on a day when armor has never been more necessary. [...] They are hostages to their emotions, rather than masters of them through their intellect. We, who were outraged in 1940 when men were sent to fight armored tanks with rifles, are not outraged when young people, men and women, are thrown into the world to fight mass propaganda with a handful of articles (Sayers, 2009, p. 17, our translation).

It should be acknowledged that the conclusions presented here stem from an interpretive literature review and are therefore limited to the set of references analyzed. Future empirical studies may investigate more specifically how different strategies for using ICTs influence the development of attention, self-regulation of learning, and the cultivation of willpower at various educational levels and in different school contexts.

Finally, it is hoped that this study will contribute to broadening the debate on the anthropological foundations of learning, bridging classical reflections on the formation of the will with contemporary discussions on digital technologies and pedagogical innovation.

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