GAMIFICATION AND TEACHER ACTIVISM: TECHNOLOGY, DISTANCE EDUCATION AND VOICES THAT TRANSFORM

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GAMIFICACIÓN Y ACTIVISMO DOCENTE: TECNOLOGÍA, EDUCACIÓN A DISTANCIA Y VOCES QUE TRANSFORMAN

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ABSTRACT
This article reviews issues that examine the concept known as "Alpha engendering", whose main characteristic is the valorization of technological autonomy in the contemporary educational context. The approach is based on dynamic pedagogical practices that reconcile the valorization of the collective with respect for individuality, promoting an agile and innovative educational process with the potential to stand out historically. Gamification is understood as a promising resource - almost a "savior" - in facing the challenges imposed by distance education. The pedagogical practice is analyzed based on the incorporation of playful elements, such as digital games, which stimulate critical thinking, favor cognitive development and reposition the student as the protagonist of his/her learning process, that is, as the author of knowledge. The article, in addition to gamification, addresses the use of active methodologies, such as project-based learning, hybrid teaching and the flipped (or reversed) classroom, which break with traditional teaching models and seek greater student engagement. It also discusses e-learning, a form of teaching mediated by digital technologies and social networks, which expands the possibilities of access to knowledge, but which also reveals contradictions, such as the false sense of balance promoted by digital platforms, while at the same time accentuating social inequalities. The article is based on a literature review and an interview published with Professor Nelson Pretto, recognized for his defense of critical, militant and transformative education. We analyze the author's emphasis on the role of digitalization in the educational process, focusing on the importance of democratizing communication, the use of free software in the school environment and the discussion about internet ownership, often concentrated in the hands of large corporations. The article proposes a deep reflection on the paths of

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education in the digital age, considering both the potential and the risks of technologies, especially with regard to autonomy, inclusion and social justice in the educational environment.

Keywords: Autonomy. Technological. Educational. Hybrid. Knowledge.

RESUMO
Este artigo revisa questões que examinam o conceito conhecido como "Alpha engendering", cuja principal característica é a valorização da autonomia tecnológica no contexto educacional contemporâneo. A abordagem se baseia em práticas pedagógicas dinâmicas que conciliam a valorização do coletivo com o respeito à individualidade, promovendo um processo educacional ágil e inovador, com potencial para se destacar historicamente. A gamificação é entendida como um recurso promissor – quase um "salvador" – no enfrentamento dos desafios impostos pela educação a distância. A prática pedagógica é analisada a partir da incorporação de elementos lúdicos, como os jogos digitais, que estimulam o pensamento crítico, favorecem o desenvolvimento cognitivo e reposicionam o aluno como protagonista do seu processo de aprendizagem, ou seja, como autor do conhecimento. O artigo, além da gamificação, aborda o uso de metodologias ativas, como a aprendizagem baseada em projetos, o ensino híbrido e a sala de aula invertida (ou flipped classroom), que rompem com modelos tradicionais de ensino e buscam maior engajamento dos alunos. Discute-se também o e-learning, modalidade de ensino mediada por tecnologias digitais e redes sociais, que amplia as possibilidades de acesso ao conhecimento, mas que também revela contradições, como a falsa sensação de equilíbrio promovida pelas plataformas digitais, ao mesmo tempo em que acentua as desigualdades sociais. O artigo se baseia em revisão bibliográfica e entrevista publicada com o professor Nelson Pretto, reconhecido pela defesa de uma educação crítica, militante e transformadora. Analisamos a ênfase do autor no papel da digitalização no processo educacional, com foco na importância da democratização da comunicação, no uso de softwares livres no ambiente escolar e na discussão sobre a propriedade da internet, muitas vezes concentrada nas mãos de grandes corporações. O artigo propõe uma reflexão profunda sobre os caminhos da educação na era digital, considerando tanto as potencialidades quanto os riscos das tecnologias, especialmente no que se refere à autonomia, à inclusão e à justiça social no ambiente educacional.

Palavras-chave: Autonomia. Tecnológico. Educacional. Híbrido. Conhecimento.

RESUMEN
Este artículo revisa cuestiones que examinan el concepto conocido como "generación alfa", cuya principal característica es la valorización de la autonomía tecnológica en el contexto educativo contemporáneo. El enfoque se basa en prácticas pedagógicas dinámicas que concilian la valorización de lo colectivo con el respeto a la individualidad, promoviendo un proceso educativo ágil e innovador con potencial para destacar históricamente. La gamificación se entiende como un recurso prometedor, casi una "salvación", para afrontar los retos que impone la educación a distancia. La práctica pedagógica se analiza a partir de la incorporación de elementos lúdicos, como los

juegos digitales, que estimulan el pensamiento crítico, favorecen el desarrollo cognitivo y reposicionan al estudiante como protagonista de su proceso de aprendizaje, es decir, como creador de conocimiento. El artículo, además de la gamificación, aborda el uso de metodologías activas, como el aprendizaje basado en proyectos, la enseñanza híbrida y el aula invertida, que rompen con los modelos de enseñanza tradicionales y buscan una mayor participación del alumnado. También aborda el e-learning, una forma de enseñanza mediada por tecnologías digitales y redes sociales, que amplía las posibilidades de acceso al conocimiento, pero que también revela contradicciones, como el falso sentido de equilibrio promovido por las plataformas digitales, al tiempo que acentúa las desigualdades sociales. El artículo se basa en una revisión bibliográfica y una entrevista publicada con el profesor Nelson Pretto, reconocido por su defensa de la educación crítica, militante y transformadora. Analizamos el énfasis del autor en el papel de la digitalización en el proceso educativo, centrándonos en la importancia de democratizar la comunicación, el uso de software libre en el entorno escolar y la discusión sobre la propiedad de internet, a menudo concentrada en manos de grandes corporaciones. El artículo propone una profunda reflexión sobre los caminos de la educación en la era digital, considerando tanto el potencial como los riesgos de las tecnologías, especialmente con respecto a la autonomía, la inclusión y la justicia social en el entorno educativo.

Palabras clave: Autonomía. Tecnológica. Educativa. Híbrida. Conocimiento.

INTRODUCTION

The article critically examines the development and application of educational technologies, with emphasis on gamification as a strategy in Distance Education (DE). This approach not only redefines the pedagogical space, but also highlights the importance of teachers taking on the role of political activists and social communicators, acting inside and outside the classroom. Technology, in this context, is not seen only as a tool, but as a field of ideological and cultural disputes that requires clear and engaged positions on the part of educators.

The analysis is based on the ideas of Professor Nelson de Luca Pretto, whose contributions highlight the urgency of promoting authentic digital inclusion and democratizing access to the media, combating the concentration of media power in the hands of large economic groups. Although Pretto brings relevant reflections, the article points out the absence of practical and viable proposals to face these challenges, recognizing that the solutions involve complex political and economic articulations.

Another point discussed is the defense of the use of free software in educational institutions, as opposed to agreements with large companies such as Google, whose platforms can compromise the privacy of student data. Despite the importance of this warning, the text also identifies argumentative gaps in the defense of this proposal, since free software does not always offer the same efficiency or ease of use as commercial programs, which can limit its adoption on a large scale.

Pretto also warns of the growing appropriation of the internet by corporations, which shape the user experience through non-transparent algorithms, creating information bubbles and restricting critical thinking. It is a complex issue, with multiple political, technological and social dimensions, and which requires continuous attention, as the author himself takes up in later texts.

On the theoretical level, Pretto argues that education, science, technology, health and culture must be understood in an integrated way. Such a perspective is already echoed in recent educational guidelines, such as the BNCC (National Common Curricular Base), which promotes a more holistic and interdisciplinary view of education. The articulation between these areas, driven by digital technologies, profoundly modifies the way we relate to knowledge and how teaching is organized.

Digital technologies not only transform the means of communication, but also shape new languages and forms of expression, from typing with the thumbs to the use

of symbols, emojis, images and sounds as legitimate elements of the construction of knowledge. With this, the internet consolidates itself as an active social space, conducive to the collective production of knowledge and social transformation.

The article highlights the existence of significant socioeconomic barriers that hinder equitable access to these technologies. The challenge, therefore, is to ensure that digital tools are appropriated as an expression of culture and citizenship, and not just as technical instruments.

In particular, the article highlights the Alpha generation — made up of children born between 2010 and 2019 — as the first digital native par excellence. This generation has high connectivity, creativity, sociability, and technological autonomy. However, it can also suffer consequences such as attention deficit, difficulties in social interactions, and imbalances in family relationships. In this scenario, teachers are called upon to rethink their pedagogical practices, using active methodologies and technological resources that dialogue with the interests and potentialities of these students.

The contemporary educator needs to be more than a transmitter of content: he must be a conscious mediator, a critical analyst of technology, and an agent of social transformation, capable of using digital tools to stimulate curiosity, critical thinking, and intellectual autonomy of students.

LEARNING, CONFRONTATIONS AND DIDACTIC CONFLICTS

Contemporary pedagogical practices have been incorporating innovative strategies, such as gamification, hybrid teaching, and the flipped classroom, to make the teaching-learning process more dynamic and student-centered. Gamification uses elements of games to promote engagement, stimulate critical thinking, and develop students' cognitive skills, encouraging them to take an active role in building their own knowledge.

Teachers can adopt approaches based on didactic confrontations and relevant themes, such as project-based learning methodologies and generative themes, which challenge students to think, question and seek solutions, developing important skills such as autonomy and reflection.

Hybrid teaching, which combines face-to-face moments with activities carried out remotely, favors the personalization of learning, allowing students to explore the content

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independently and meaningfully. In the flipped classroom, students have prior contact with the content, usually through videos, texts, or other digital resources, and use the time in the classroom to discuss, ask questions, and deepen their knowledge, which makes learning supportive and inclusive.

Active methodologies are important resources, such as *e-learning*, which integrates digital technologies into the educational process. These tools, accessible by devices such as *smartphones*, *tablets*, and computers, support teaching and strengthen the development of cognition. The context presented highlights the emergence of Distance Learning (EAD), which expands access to education through the combination of digital content and innovative pedagogical practices, reinforcing the role of technologies as allies in the training of students.

> [...] The recent history of the adjectives of nouns related to teaching (face-to-face, distance and virtual) seems to have been taken to the limit, until it was overcome by their suppression, in the name of learning. Extrapolating the school space, towards new learning environments, one ends up adjectivating education itself: academic and corporate. (Barreto, 2006, p. 40).

The teaching methodology proposed by Paulo Freire, started in the 1960s, is based on the promotion of students' autonomy through dialogue, interpersonal relationships and the construction of a critical consciousness, enabling them to make decisions freely and consciously. The model presented shows that the teacher is no longer the only holder of knowledge and becomes a mediator, connecting school content with students' previous knowledge, valuing their experiences and personal stories.

Different from the traditional method, where the teacher is the center of the educational process, the Freirean approach places the student as the protagonist of learning. The construction of knowledge occurs through the interaction between the knowledge brought by the students and the formal knowledge, mediated by the teacher.

Theorists such as Henri Wallon and Jean Piaget also point out that the child is not passive in the educational process, but active and in constant development. Wallon proposes a theory with four stages: impulsive-emotional (up to 1 year), sensorimotor (1 to 3 years), personalism (3 to 6 years) and categorical (from 6 years old), emphasizing the importance of the environment and emotions in development. It recognizes the influence of technologies, such as videos and games, on children's interactions and

learning. In advance, Piaget divides development into two initial stages: sensorimotor (0 to 2 years) and pre-operational (2 to 6 years), highlighting the importance of experiences with the environment and the role of technologies in stimulating language, logic and symbolic thinking.

The article discusses the relevance of Information and Communication Technologies (ICTs) and gamification in teacher training and pedagogical practice. Understanding that this is a current theme, the article has flaws, such as the absence of references to recent studies on the use of ICTs in education. This lack of updating compromises the applicability of the information, considering the rapid technological evolution that directly impacts educational practices.

> [...] Transformations in the use of digital technologies coexist with the so-called traditional media, still instituted in an oligopolistic manner. What is observed in this field is the existence of a movement of concentration of ownership of the media, with an enormous concentration of capital around a few families, or groups that dominate the entire process of production and symbolic distribution of the planet. In Brazil, there are only six families that command this economic segment and more or less the same happens in international terms. It is the owners of the media in the strict sense of the term who, in recent years, have extended their tentacles to telecommunications [...]. (Pretto, 2011, p. 99).

The article highlights that, although it addresses the importance of Information and Communication Technologies (ICTs) in teacher training, the analyzed article has significant limitations in its critical deepening. One of the main weaknesses is the absence of a more robust discussion about the challenges faced in incorporating these technologies into the educational context. Although the author briefly mentions the need for teacher training and the resistance of some professionals to the use of ICTs, these issues are treated superficially, without proper analysis of their causes and implications.

Understanding a more complete approach requires understanding that it would be essential to explore factors such as the difficulty of access to technologies, especially in regions with precarious infrastructure; the lack of digital skills on the part of many teachers, who have not received adequate training to deal with technological tools; and the inexistence or ineffectiveness of public policies aimed at digital inclusion in the educational environment. The elements represent concrete obstacles that directly influence the implementation of ICTs in pedagogical practice and, therefore, cannot be neglected.

The article criticizes the absence of concrete examples and case studies. The inclusion of practical experiences and success stories could illustrate more clearly how ICTs can be applied effectively in teacher training, contributing to overcoming resistance and improving teaching. The real cases would allow a better understanding of the strategies adopted by institutions or educators, the results obtained and the challenges faced, making the content more relevant and applicable.

The article points out that, despite addressing a current and important topic, the analysis of the article shows that it lacks superficiality in the analysis of obstacles and the lack of practical examples, compromising its usefulness for a more critical and realistic understanding of the integration of digital technologies in teacher education.

> [...] Technologies can serve both to innovate and to reinforce behaviors and communicative models of teaching. The mere use of one or the other equipment does not presuppose educational or pedagogical work. In the opinion of Orozco (2002), "technicism alone does not guarantee a better education. [...] if the educational offer, as it is modernized with the introduction of new technologies, expands and even improves, learning, however, remains a doubt" (p. 65). For the author, each medium and each technology exert a particular mediation [...]. (Porto, 2006, p.44).

The analysis of Nelson Preto's article is critically effective, highlighting that, although it deals with an important theme — the use of technologies in education — it has weaknesses. The author mentions some proposals, such as virtual learning environments and online communities of practice, but does not offer concrete data or examples that demonstrate how these strategies are being applied in teacher training and what results they have generated.

The lack of updating and depth in the analysis of the challenges demonstrates that the article lacks practical examples that could better illustrate the effectiveness of educational technologies in the daily life of teachers.

The article jointly addresses the contribution of Álvaro Vieira Pinto, a philosopher and influential thinker in the 1960s, who had a strong impact on Paulo Freire's theoretical training. Vieira Pinto criticized what he called the "archaic youth", an expression used to refer to the exclusion of advanced technologies from the reality of a large part of the population, as a way of maintaining social inequalities. He saw technology as an instrument of social transformation and believed that technical knowledge should be accessible to all workers. He observed that the more an individual improves his ability to work, the more he becomes human. He argues that critical

consciousness should be in the hands of the masses, because only through it is it possible to appropriate technological knowledge and promote changes in reality. Vieira Pinto also discussed the inequality between what he called the "Center" and the "Periphery" in the distribution of technological knowledge, reinforcing the importance of equitable access to technical-scientific knowledge.

The article contrasts the superficiality of Nelson Preto's article with the depth of Álvaro Vieira Pinto's thought, emphasizing the need for a more critical, up-to-date and practical approach to the use of technologies in education.

> [...] publication of Consciência e realidade nacional (1960) until the very recent publication of O conceito de tecnologia (2005), passing through Ciência e existência (1979) and El pensamiento crítico en demografía (1979), his work housed a dense reflection on the social meaning of philosophy in poor places. This dense reflection, however, faced and faces great obstacles to reach the knowledge of a wider audience. An example of this is that only now his magnificent study The Concept of Technology has been edited. This means Economics and education: the contribution of Álvaro Vieira Pinto to the historical study of technology Marcos Cezar de Freitas Pontifical Catholic University of São Paulo, Program of Post-Graduate Studies in Education: History, Politics, Society Economy and education Brazilian Journal of Education v. 11 n. 31 Jan./Apr. 2006 81 that generations have discussed the theme of development without knowing one of the most complete treatises on the subject [...]. (Freitas, 2006, p. 81)

The studies carried out by Álvaro Vieira Pinto brought together elements of anthropology and economics, which he called "critical knowledge in demography". One of its central concepts is that of "man-situation", which describes the individual as deeply linked to the activity he performs, to the point that his identity is molded to work. For the author, the people are not lacking in knowledge, but rather in adequate conditions to exercise their productive role. He believed that the role of the State was to serve the people, and that only by breaking with the current paradigms would it be possible to achieve true social development.

Vieira Pinto explored the notion of technology in a broad way, connecting it to the consciousness and reality of the country, without restricting it to the idea of a purely technological era. He understood that the level of technological development of a society is directly linked to social inequalities, a relationship that, far from being negative, represents an opportunity for human advancement and overcoming these inequalities through work and critical awareness.

In the same situation, the text under analysis discusses how social transformations driven by technological advancement create a false sense of equality,

while at the same time they can intensify social disparities. It is essential to consider not only the technical aspects of technologies, but also their social contexts, especially in the educational field. It highlights the importance of training teachers prepared to integrate technologies into pedagogical practice, going beyond the simple use of digital tools. It proposes a pedagogical approach focused on the dialogue between teachers and students, using technologies as instruments that enhance teaching, arouse the interest of students and promote the construction of new knowledge.

The pedagogy of communication emerges as a proposal that values teacher training in tune with the school environment and the media. It encourages the use of multiple languages, promoting sensitivity, critical reflection and the ability to transform reality. This approach values the cultural and media diversity present in contemporary society, strengthens the self-esteem of educators, and contributes to a more humane, meaningful, and transformative education.

It safeguards that the school must address relevant content that is connected to the lives of students, going beyond the traditional themes of the curriculum. The conscious use of media and technological resources, combined with the sensitive look of the educator, can make education more inclusive and aligned with the demands of today's world.

> [...] the development of an alternative form of organization, characterized by distribution (of planning, production, sales) with a pseudo-horizontalization of a significant part of the decision-making process. Now we don't easily locate a person at the top of the org chart. We began to refer to multinational companies, the financial system – which became international –, trade, services, always from a planetary perspective, and the production of knowledge itself seems to be following this model that we could call horizontal network organization. One of the most remembered examples in our recent history of this mode of organization came from the United States Department of Defense, during the Cold War, which, upon requesting the Advanced Research Projects Agency (ARPA) for a computer network capable of continuing to function in the absence of a node or a broken connection, gave rise, in 1969, to to the Internet (ISOC, 2000), [...]. (Pretto, 2006, p. 20)

The purpose is for teachers to reflect together and prepare themselves to address controversial topics, facing prejudices and stereotypes, with emphasis on the need to critically interpret the representations of reality made by the media.

FINAL CONSIDERATIONS

From the initial analysis of the articles and interviews examined in the light of the concepts of gamification and Distance Education (DE), it is observed that technology can be a strong ally in the cognitive development of children and young people. It contributes to placing them as active agents in their own learning process. The scenario presents the importance of the family and the educators, in the process of assuming fundamental roles as mediators and facilitators of this journey.

The use of digital platforms and educational applications has proven effective in supporting the learning of symbols and signs, essential elements in literacy and literacy processes. The article proposes a reflection on the use of communication technologies associated with pedagogical practices, highlighting the relevance of promoting meaningful and contextualized learning experiences. Although the teacher is appointed as a protagonist in the educational process, the text also recognizes the importance of the active participation of students and the environment in which they are inserted.

Researcher Álvaro Vieira Pinto, a thinker ahead of his time, influenced many intellectuals and, with an innovative view of technology, argued that human beings, through work and critical awareness, are capable of transforming their reality. He saw technology not only as a tool, but as a cultural expression, and therefore the appropriation of digital media must go beyond technical use, being understood in its social and cultural dimension.

The analysis points out some limitations in the study, such as the absence of updated references and the lack of concrete examples on the practical application of ICTs in teacher training. This gap reveals the need to deepen studies to contribute to the daily practice of education, especially in the current context, where digital technologies are already part of students' lives from the earliest years.

Contemporaneity shows that we live in an era marked by the constant presence of screens — cell phones, tablets, computers — that have accompanied children since childhood. These resources are used as forms of distraction, educational support and socialization. Generation Alpha, born around 2010, grew up in a completely digitized environment, marked by a visual, global, and connected culture. They are autonomous children in the use of technologies, who not only consume content, but also actively produce and interact with the digital environment.

The context gives rise to the debate on how to prepare education to meet the needs of this new generation. Emerging technologies, especially artificial intelligence, have caused profound changes in the education sector. Depending on the context, they can bring new possibilities, impose challenges on how to integrate them effectively into the teaching-learning process throughout life.

The speed with which these transformations occur requires educators, managers, and public policy makers to be attentive and committed to the principles of education and Brazilian legislation. It is important to ensure that innovation goes hand in hand with essential educational values, ensuring an inclusive, critical, and transformative education, capable of keeping up with the times and forming citizens prepared to act in an increasingly technological society.

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