ARTICULATION BETWEEN CURRICULUM, METHODOLOGIES AND DIGITAL TECHNOLOGIES: PATHWAYS TO PEDAGOGICAL INNOVATION

ARTICULAÇÃO ENTRE CURRÍCULO, METODOLOGIAS E TECNOLOGIAS DIGITAIS: CAMINHOS PARA INOVAÇÃO PEDAGÓGICA

ARTICULACIÓN ENTRE CURRÍCULO, METODOLOGÍAS Y TECNOLOGÍAS DIGITALES: CAMINOS HACIA LA INNOVACIÓN PEDAGÓGICA

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ABSTRACT

The objective of this article is to investigate the relationship between curricula, methodologies and digital technologies to improve pedagogical mediation and knowledge construction. Through a bibliographical research, works that address curricular innovation and the use of technologies in the educational context were analyzed, making it possible to identify concepts, obstacles and opportunities of this relationship in current education. The analysis revealed that the combination of these elements is crucial for the realization of a more dynamic, inclusive education that is aligned with the needs of 21st century society, emphasizing the value of critical and planned pedagogical mediation by teachers. Obstacles such as inadequate infrastructure, few policies that contribute to innovation and minimal provision of continuing education for teachers were also pointed out. Thus, it is considered that the research made it possible to understand how this relationship contributes to the improvement of pedagogical practice and the advancement of learning, also indicating the possibility for future studies that deepen innovative practices in different school environments, aiming to strengthen a more effective and inclusive education.

Keywords: Curriculum. Methodologies. Technologies.

RESUMO

O objetivo do presente artigo é investigar a relação entre currículos, metodologias e tecnologias digitais para aperfeiçoar a mediação pedagógica e a construção do conhecimento. Através de uma pesquisa bibliográfica, foram analisadas obras que abordam a inovação curricular e a utilização de tecnologias no contexto educacional, possibilitando identificar conceitos, entraves e oportunidades dessa relação na educação atual. A análise revelou que a junção desses elementos é crucial para a realização de uma educação mais dinâmica, inclusiva e alinhada as necessidades da sociedade do século XXI, enfatizando o valor da mediação pedagógica crítica e planejada dos professores. Também foram apontados entraves como a infraestrutura inadequada, poucas políticas que contribuem a inovação e oferecimento mínimo de formações continuadas para os professores. Assim, considera-se que a pesquisa possibilitou compreender como essa relação colabora para o aperfeiçoamento do fazer pedagógico, do avanço da aprendizagem, indicando também, a

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possibilidade para estudos futuros que aprofundem as práticas inovadoras em diferentes ambientes escolares, visando fortalecer uma educação mais eficaz e inclusiva.

Palavras-chave: Currículo. Metodologias. Tecnologias.

RESUMEN
El objetivo de este artículo es investigar la relación entre currículos, metodologías y tecnologías digitales para mejorar la mediación pedagógica y la construcción de conocimiento. A través de la investigación bibliográfica, se analizaron trabajos que abordan la innovación curricular y el uso de tecnologías en el contexto educativo, lo que permitió identificar conceptos, obstáculos y oportunidades de esta relación en la educación actual. El análisis reveló que la combinación de estos elementos es crucial para lograr una educación más dinámica e inclusiva, alineada con las necesidades de la sociedad del siglo XXI, destacando el valor de la mediación pedagógica crítica y planificada por parte del profesorado. También se señalaron obstáculos como la infraestructura inadecuada, las escasas políticas que contribuyen a la innovación y la escasa oferta de formación continua para docentes. Por lo tanto, se considera que la investigación permitió comprender cómo esta relación contribuye a la mejora de la práctica pedagógica y al avance del aprendizaje, lo que también indica la posibilidad de futuros estudios que profundicen en prácticas innovadoras en diferentes entornos escolares, con el objetivo de fortalecer una educación más efectiva e inclusiva.

Palabras clave: Currículo. Metodologías. Tecnologías.

1 INTRODUCTION

The incorporation of digital technologies in the school curriculum has become a priority for the improvement of pedagogical practice in current education, because, in a panorama marked by rapid technological evolution, it is necessary to understand how curricula and methodologies can be articulated with digital technologies to enable a more assertive pedagogical mediation and deep learning. In view of this, the question that guides this study is: how can the use of digital technologies collaborate to improve curricula and improve the way of teaching and learning in education in these new times?

The importance of this issue is the urgency of reviewing the school curriculum so that it dialogues with the needs that the twenty-first century presents, incorporating new technologies not only as auxiliary tools, but as structuring elements of educational practice. Curricular innovation, combined with appropriate pedagogical methodologies, can increase teaching and learning opportunities, making them more dynamic, interactive and contextualized. Furthermore, the training of teachers and the critical analysis of the use of technologies are essential for this articulation to be effective and meaningful, avoiding the mechanical or superficial use of technological mechanisms.

The article entitled Articulation between Curriculum, Methodologies and Digital Technologies: Paths to Pedagogical Innovation aims to investigate the relationship between curricula, methodologies and digital technologies to improve pedagogical mediation and learning. Thus, this study dialogues with some authors who discuss this theme, reflecting on the relevance of pedagogical mediation in the use of information technologies, emphasizing Moran, Masetto and Behrens (2006, p. 54), who state that "to know is to integrate information into our reference, into our paradigm, appropriating it, making it meaningful to us". The methodology used for bibliographic research, which, according to Gil (2017), consists of the analysis and reflection on academic productions already published, such as books, articles and chapters of works relevant to the theme. This approach made it possible to understand the current moment of knowledge about the incorporation of digital technologies into the curriculum and pedagogical methodologies, identifying challenges, possibilities and tactics for educational improvement. The bibliographic research is adequate in this work, to enable a solid and updated theoretical foundation, crucial for the promotion of effective pedagogical proposals.

The following chapter initially addresses the concepts of curriculum, pedagogical methodologies, citing some examples, and digital technologies, followed by the analysis of

the interrelations between these elements from the perspective of educational innovation. Then, pedagogical mediation is discussed as a central element for the effective application of technologies in teaching, based on the contributions of authors researched in academic databases such as *SciELO*, *Google Scholar* and specialized journals in the educational field. In the end, these are final considerations that point to the obstacles and opportunities for incorporation into the current educational environment.

Thus, it is expected that this study will contribute to the academic debate and to the pedagogical practice, offering subsidies so that educators, managers and organizers of public policies can reflect on the value of the relationship between curricula, methodologies and digital technologies. From this reflection, it becomes possible to envision trajectories for a more meaningful, inclusive teaching and learning process aligned with contemporary social and technological demands.

2 CURRICULUM, METHODOLOGY AND TECHNOLOGY: EXAMPLES AND INTERRELATIONS

The school curriculum is understood as the planned organization of the contents, skills and values that guide the education of students, seeking to meet the needs of the contemporary individual. Innovative curricula have sought objectives and interdisciplinarity, promoting expressive and contextualized learning experiences; Thus, Santos, Boechat, and Carmo (2024) emphasize that the promotion of curricula that incorporate active methodologies and the strategic use of technology enables individualized, participatory, and engaged learning, aligned with student demands and social transformations.

Pedagogical methodologies refer to the strategies and approaches used by educators to facilitate the act of teaching and learning, and the incorporation of digital technologies enhances these methodologies, making teaching more dynamic and collaborative. Moran et al. (2006, p. 32) point out that "we move very quickly from books to television and video and from these to the computer and the Internet, without learning and exploring all the possibilities of each medium", reducing that the use must be critical and planned to ensure effective results.

The relationship between curriculum, methodologies and technology is essential for educational innovation, as the curriculum defines what needs to be learned, the methodologies indicate how it will be mediated, and technology offers resources that expand pedagogical possibilities. For example, the application of Problem-Based Learning (PBL) and

the Flipped Classroom, mediated by digital platforms, promotes students' collaborative performance and critical thinking. In addition, adaptive educational apps allow the content to be adjusted to each student's time and way of learning, favoring personalized teaching, according to Santos et al. (2024). These practices show how the articulation between curriculum, methodologies and technology can transform learning into a more lively and meaningful process.

For this integration to be effective, it is essential that teachers act as critical mediators, capable of articulating curriculum, methodologies and technologies with reflection and contextualization. In this sense, Scherer and Brito (2020) emphasize that the continuous training of teachers and investment in adequate technological infrastructure are indispensable conditions to leverage curricular innovation, and that this is not limited to the use of new tools, but requires a profound change in the way of teaching and in the structuring of teaching.

The articulation between curriculum, methodologies and technology is an aspect of great importance for paving a more meaningful, inclusive education aligned with the demands of the twenty-first century, collaborating for the formation of critical, independent students prepared for the reflection of the contemporary world, contributing to a learning that goes beyond the simple transmission of content.

3 FINAL THOUGHTS

The research carried out allowed us to reflect a little on the way of articulating curricula, methodologies and digital technologies in contemporary society and with the bibliographic research, it was possible to identify that this relationship is vital for the improvement of pedagogical practices, emphasizing the value of critical mediation and the reformulation of the way of teaching and learning to meet current demands. It was observed that the planned and reflective use of digital technologies increases the chances of a more meaningful and personalized teaching and learning, although there are still barriers related to the lack of training for teachers, precarious school infrastructure and educational policies that need to be reformulated.

The analysis also indicated that pedagogical mediation continues to be the central element for the success of this articulation, reinforcing the priority in the appropriate use of technologies and a critical and contextualized approach, however knowing that this research is not exhaustive, but rather suggests the execution of future investigations that empirically

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explore innovative practices in different school environments, considering regional and socioeconomic specificities, being able to collaborate in the structuring of more effective procedures that strengthen the articulation between curriculum, methodologies and digital technologies, enabling an education that can meet the needs of twenty-first century society.

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