Thematic Editors

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With the accelerating convergence between digital platforms and technologies and biotechnology, innovative concepts such as “metaverse ecologies” and “transhumanism” are emerging that offer critical perspectives for understanding how technologies transform our physical and cognitive capacities, as well as the way we understand our identity and culture.

The metaverse posits a new form of interaction that transcends physical and cultural barriers, and creates spaces where users can inhabit, interact and construct new realities. In this environment, the ecologies of the metaverse refer not only to the interaction between the various technological elements that comprise it but also to the socio-cultural, educational, and economic dynamics that traverse it. These ecologies highlight the need to understand the new forms of interconnection and the implications they have on the construction of digital identities and the creation of communities.

In this context, transhumanism offers a vision of the future where the boundaries between biological and technological are blurred. Transhumanism focuses on physical or cognitive enhancement and the creation of new forms of digital life, leading to digital reculturalization that impacts how we relate to the world and each other. It is insufficient to view culture as something static or inherently human; instead, we must recognize how technological tools are engines of cultural change, transforming our conceptions of reality and identity.

This monograph seeks to offer a deep understanding of these dynamics, which are shaping a new cultural and educational landscape.

The article by Islas-Carmona, Gutiérrez-Cortés, and Arribas-Urrutia explores how artificial intelligence influences culture and the historical advancement of societies. Employing Media Ecology as their analytical framework, the researchers describe the potential effects of generative AI, highlighting eight critical scenarios and synthesizing them into four threats: malicious use, AI races, organizational risks, and uncontrolled AI. Drawing inspiration from McLuhan, they suggest that the accelerated evolution of AI requires literacy and regulation before its impact becomes irreversible.

On the other hand, the second article, by Laurens Arredondo, focuses on education during the pandemic and the emergence of the metaverse as a solution to the educational challenges brought by forced virtualization. Through a systematic review of studies on the "metaversity," the article identifies educational benefits, such as improved cognitive skills and personalized learning. Although no comprehensive models exist, the transformative potential of the metaverse in higher education is highlighted, offering a combination of immersive learning and virtual social interaction.

Quintero-Rodríguez and Colás-Bravo analyze YouTube as a tool for informal learning. Through a questionnaire applied to over 500 participants, correlations were identified between the

platform's technical characteristics and its pedagogical value. In this case, YouTube was positively evaluated for its accessibility and content diversity, demonstrating its relevance as an educational resource adaptable to user needs, varying by age and usage frequency.

In a different context, Órfão and Días investigate the impact of TikTok on body image and self-esteem among adolescent males, a group that has been little studied thus far. Through interviews with young people, the results show that TikTok influences their body image and self-esteem both positively and negatively, depending on the content consumed. While some users improve their exercise and dietary habits, others experience negative impacts due to constant surveillance of their appearance, which contrasts with previous studies on female adolescents.

Continuing in the realm of social networks, Martínez-Sanz and Durántez-Stolle study how virtual communities on TikTok generate knowledge about blood donation and attract new donors. The analyzed testimonies show a positive perception of donation and the ability of communities to imitate altruistic behaviors. Additionally, collective intelligence and user support contribute to creating informative content that promotes generational turnover in blood donation, highlighting the power of digital platforms to motivate altruistic actions.

Regarding the educational potential of video games, García Mejía and De la Herrán developed the CEV 5* tool to assess their "educativeness." Based on interviews with teachers and industry experts, this rubric allows educators, parents, and users to evaluate the educational value of video games simply and effectively. Thus, it facilitates both the design and the conscious selection of video games in educational and leisure contexts, providing a helpful guide for those who wish to use video games for pedagogical purposes.

Researchers Ajuriaguerra, Chidean, and De Jorge Huertas analyze an educational program that fosters spatial intelligence in secondary students, emphasizing the importance of combining digital and traditional tools. The study demonstrates that, while digital tools are helpful, they must be complemented by classic methods to achieve optimal spatial development, especially in training future architects and engineers.

On another front, González-Pérez, García-Barrera, and Martínez-Álvarez present a study on problematic ICT use and its relationship with adolescent-to-parent violence. With a systematic review, they identified three instruments to assess this problem and design educommunicative training programs. These programs aim to prevent improper ICT use and manifestations of violence, contributing to improved parent-child communication, which is crucial for family well-being.

In a more specific field, Zurita Díaz and Calleja Reina analyze the use of assistive technologies in children with autism spectrum disorder, specifically combining assisted language stimulation with ICT tools. The results show that multimodal ICT support is more effective than traditional paper-based resources, significantly improving children's communication and social skills and offering a more interactive and effective approach to their development.

Finally, González-Ramírez, Bartolo, López Gracia, Ponziano, and Perfetti address the issue of hate speech on social media, particularly during the COVID-19 pandemic. They highlight its impact on vulnerable groups, such as healthcare workers and people with disabilities. The results emphasize the need for an educational approach that promotes respect for diversity and the responsible use of digital platforms, especially in the post-pandemic context, where fostering respectful digital coexistence is crucial.