Forward: Special Issue - Emerging Technologies and the Future of Education

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In the inaugural issue of the International Journal of Emerging and Disruptive Innovation in Education (iJEDIE), readers are presented with a special issue focused on "Emerging Technologies and the Future of Education." This special issue emerges from an eponymous panel held on April 21, 2023, at Lindenwood University and sponsored by the College of Arts and Humanities. The panel emphasizes the transformative potential of emerging technologies, such as artificial intelligence (AI), virtual and augmented reality (VR/AR), and online learning platforms on the future of education. It highlights their ability to enhance the personalization and customization of the learning experience, improve accessibility and efficiency in education, and enable more effective measurement and tracking of student progress. To explore these transformative possibilities, the panel brought together a diverse group of researchers and practitioners from fields, including Artificial Intelligence, Education Technology, Digital Humanities, Extended Reality (XR), and Machine Learning. The panel served as a platform for these experts to present their recent research findings regarding the use of emerging technologies to disrupt, enhance, and revolutionize traditional educational approaches. Their presentations showcased the potential benefits of these technologies for both teachers and learners, emphasizing the importance of engagement, accessibility, and improved assessment methods in education.

Given their contributions to education in the Digital Age, the entire Editorial Board wishes to recognize the contributions of panelists, contributors, reviewers, and the dedicated team involved in the creation of this special issue. We anticipate that the original research contained within will inspire readers, spark curiosity, and encourage further exploration of the complex relationship between emerging technologies and education. Furthermore, we acknowledge the role of these contributions in shaping the future of learning by pushing the boundaries of what is currently possible. The special issue encompasses a diverse range of themes that explore the transformative potential of emerging technologies in education. The following provides an overview of the major themes discussed by the presenters, shedding light on the innovative approaches and insights shared throughout the panel.

One prominent theme explored in the special issue is online education and the utilization of avatars. Dr. Gary Burnett and Dr. Catherine Harvey from the University of Nottingham, UK, conducted an investigation on the advantages and disadvantages of using avatars in virtual learning spaces. Their research delved into the experiences of university students who interacted with one another and teaching staff in avatar form. The findings revealed a number of benefits, such as increased confidence to participate in class discussions, freedom to express oneself in unique ways, and reduced concerns over physical appearance. However, the research also identified challenges, including distractions caused by certain avatars and usability issues in avatar design. Overall, this theme highlights the potential of avatars in enhancing online education experiences and calls for the development of a design framework for their effective use in higher education.

Another theme explored in the special issue is gamification and game-based learning. Dr. Melissa Elmes, Associate Professor of English at Lindenwood University, shared her experiences of using video games to jumpstart student research in the humanities classroom. By incorporating medieval-themed video games, Dr. Elmes engaged students' interests and fostered open-ended inquiry and research. This approach not only harnessed students' natural curiosity but also encouraged collaboration with research librarians and experts in related fields. By using video games as a catalyst, students developed a genuine

desire to delve more deeply into their chosen subjects, resulting in more meaningful and original research outcomes. This theme underscores the power of gamification in promoting student engagement and encouraging deep learning experiences.

Blockchain and Artificial Intelligence (AI) emerged as another significant theme within the special issue. Dr. Alexandru Capatina, a professor at Universitatea „Dunărea de Jos" din Galați, Romania, conducted a global study on the potential of immersive technology enabled by blockchain to deliver educational content to students aged 8-16. The research highlighted the role of blockchain in enhancing the personalized delivery of educational materials and facilitating secure transactions within the learning process. Additionally, the integration of AI in education was discussed by Dr. Naresh Kshetri, Assistant Professor of Cybersecurity at Lindenwood University. His presentation explored the implications and ethical considerations of adapting blockchain technology in finance and business. Both themes demonstrate the transformative potential of blockchain and AI in redefining educational practices and addressing the evolving needs of learners and educational institutions.

Virtual Reality (VR) emerged as a compelling theme in the special issue. Dr. Paula McDowell, an Assistant Professor at the University of Saskatchewan, Canada, conducted a qualitative study on the affordances and constraints of youth creating with immersive learning technologies. The research focused on the experiences of eighth grade students who engaged in guided learning adventures and collaborative activities within VR environments. The findings revealed that VR provided safe spaces for students to take creative risks, express themselves, and collaborate in innovative ways. While some participants experienced physical discomfort, the majority expressed a strong desire to explore and learn more through VR. This theme highlights the potential of immersive learning technologies, such as VR, in fostering creativity, wonder, and imagination among students.

Furthermore, the special issue delves into the disruptive and transformative potential of generative AI with the work of Dr. Jason Gulya, professor of English at Berkeley College, USA. Dr. Gulya's presentation explores the concept of "originality" in the age of AI and argues that collaborative originality is the future of higher education. By emphasizing collaboration, interdisciplinary approaches, and the blurring boundaries between humans and machines, Dr. Gulya highlights how AI technology, such as ChatGPT and Hyperwrite, can revolutionize our understanding of what it means to be "original." This theme underscores the profound impact that generative AI can have on teaching, learning, and the creation of knowledge, opening up new possibilities for collaborative and innovative approaches to education.

In all, the inaugural issue of the International Journal of Emerging and Disruptive Innovation in Education presents an array of themes that collectively showcase the transformative potential of emerging technologies in education. From the exploration of online education and avatars to gamification, blockchain, virtual reality, and generative AI, this special issue offers a comprehensive examination of how these technologies can disrupt conventional educational methods, enrich learning experiences, and shape the future of education. It serves as a valuable resource for researchers, practitioners, and policymakers who are eager to harness the power of emerging technologies to revolutionize education and create more inclusive, engaging, and effective learning environments.

As we reflect on the breadth of topics covered in this special issue, we invite contributors and readers alike to contemplate future potential themes and areas of exploration within the realm of emerging

technologies and education. The field continues to evolve at a rapid pace, and there are numerous exciting avenues for further study. We encourage researchers, educators, and innovators to share their insights, findings, and suggestions for future special issues, ensuring a continuous exchange of knowledge and pushing the boundaries of what is possible in the realm of education. Together, we can collectively drive the transformative power of emerging technologies and shape the future of education for the better.