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Digital Learning

Title:

Web-based videoconferencing and 3D Multiuser Virtual teaching spaces in the post-COVID-19 era

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Abstract

Web-based videoconferencing has gained a great momentum worldwide, with extremely high adoption rates during the COVID-19 pandemic. Our previous studies for online teaching and learning during the lockdown, provided evidence for a positive overall attitude of University students about online and blended distance education (Nikou, 2022). Our proposed model also predicted the continuance intention to use web-based videoconferencing systems for teaching in terms of the perceived ease of use, perceived usefulness, facilitating conditions, social influence, satisfaction, and confirmation (Nikou, 2021a; 2021b). Extending our previous work, the current study aims to explore the potential of metaverse for learning, by investigating 3D virtual reality videoconferencing teaching and learning environments. These online learning environments can involve multiple users (teachers and students) to meet, communicate, collaborate, and learn in virtual environments in an immersive way. Virtual reality technologies are emerging, and they are highly promising for online teaching and learning. However, there is an ongoing discussion about the main affordances of 3D virtual spaces (immersion, presence, and embodiment) and how these can be utilised to facilitate interactions in formal educational contexts such as lectures or seminars and informal contexts such as museums. The current study will present current trends in the use of the 3D multiuser virtual teaching and learning environments in education, reflecting on the learning theories that underpin these environments. Also, the study aims to present some preliminary findings regarding students' and teachers' perceptions and attitudes regarding the use of these teaching and learning environments.

References

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