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The Applications of Augmented Reality (AR) and Virtual Reality (VR) in Teaching Medical and Dentistry Students: A Review on Advantages and Disadvantages

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Abstract

An interactive three-dimensional (3D) experience known as augmented reality (AR) employs computers to superimpose virtual data over the real world. Virtual reality (VR) is the artificial computer reconstruction of a real-life environment or experience. In the last decade, academic medical and dental institutions have witnessed the emergence of teaching technologies created using extended reality technology, such as AR and VR. It has been suggested that these technological advancements might support and further improve the medical and dentistry student teaching process. However, some medical and dentistry educationists are still sceptical about the usage of these technologies. This is because, throughout the centuries, the students in both fields were trained via established conventional methods. The purpose of this paper is to understand the benefit and impediments use of both technologies. We aim to review the advantages and disadvantages of AR and VR applications in the teaching process of medical and dentistry students. © 2023 UPM Press. All rights reserved.

Author Keywords

Advantages; Augmented reality; Disadvantages; Medical and dentistry student; Virtual reality

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