Virtual Reality Learning Environment in Embryology Education

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Abstract: Educational technology is changing the way how students engage and interact with learning materials. This improved the learning process amongst various subjects. Virtual Reality (VR) applications are considered one of the evolving methods that have contributed to enhancing medical education. This paper utilizes VR to provide a solution to improve the delivery of the subject of Embryology to medical students, and facilitate the teaching process by providing a useful aid to lecturers, whilst proving the effectiveness of this new technology in this particular area. After evaluating the current teaching methods and identifying students’ needs, a VR system was designed that demonstrates in an interactive fashion the development of the human embryo from fertilization to week ten of intrauterine development. This system aims to overcome some of the problems faced by the students’ in the current educational methods, and to increase the efficacy of the learning process.

Keywords: virtual reality, student assessment, medical education, 3D, embryology

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