

## An Intelligent Tutoring System Enriched with 3D Virtual Reality for Dentistry Students

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**Abstract :** With the emergence of the COVID-19 infection outbreak, the socio-cultural, political, economic, educational systems dynamics of the world have gone through a major change, especially in the educational field, specifically dentistry preclinical education, where the students must have a certain amount of real-time experience in endodontics and other various procedures. The totality of the digital and physical elements that make our five sense organs feel as if we really exist in a virtual world is called virtual reality. Virtual reality, which is very popular today, has started to be used in education. With the inclusion of developing technology in education and training environments, virtual learning platforms have been designed to enrich students' learning experiences. The field of health is also affected by these current developments, and the number of virtual reality applications developed for students studying dentistry is increasing day by day. The most widely used tools of this technology are virtual reality glasses. With virtual reality glasses, you can look any way you want in a world designed in 3D and navigate as you wish. With this project, solutions that will respond to different types of dental practices of students who study dentistry with virtual reality applications are produced. With this application, students who cannot find the opportunity to work with patients in distance education or who want to improve themselves at home have unlimited trial opportunities. Unity 2021, Visual Studio 2019, Cardboard SDK are used in the study.

**Keywords :** dentistry, intelligent tutoring system, virtual reality, online learning, COVID-19

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