Students' Perceptions and Attitudes for Integrating ICube Technology in the Solar System Lesson

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Abstract : Qatar University is engaged in a systemic education reform that includes integrating the latest and most effective technologies for teaching and learning. ICube is high-immersive virtual reality technology is used to teach educational scenarios that are difficult to teach in real situations. The trends toward delivering science education via virtual reality applications have accelerated in recent years. However, research on students perceptions of integrating virtual reality especially ICube technology is somehow limited. Students often have difficulties focusing attention on learning science topics that require imagination and easily lose attention and interest during the lesson. The aim of this study was to examine students' perception of integrating ICube technology in the solar system lesson. Moreover, to explore how ICube could engage students in learning scientific concept of the solar system. The research framework included the following quantitative research design with data collection and analysis from questionnaire results. The solar system lesson was conducted by teacher candidates (Diploma students) who taught in the ICube virtual lab in Qatar University. A group of 30 students from eighth grade were randomly selected to participate in the study. Results showed that the students were extremely engaged in learning the solar system and responded positively to integrating ICube in teaching. Moreover, the students showed interest in learning more lessons through ICube as it provided them with valuable learning experience about complex situations.

Keywords : ICube, integrating technology, science education, virtual reality
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