

Visualize Global Warming and Its Consequences Using Augmented Reality

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Abstract : Augmented Reality (AR) technology is considered to be an important emerging technology used in education today. One potentially key use of AR in education is to teach socio-scientific issues (SSI), topics that inure students towards social conscience and critical thinking. This work uses multiple markers and virtual buttons that interact with each other, creating a life-like visual spectacle. Learning about issues such as global warming by using AR technology, students will have an increased sense of experiencing immersion, immediacy, and presence, thereby enhancing their learning as well as likely improving their ability to make better informed decisions about considerations of such issues. Another advantage of AR is that it is a low cost technology, making it advantageous for educators to adapt to their classrooms. Also in this work we compare the effectiveness of AR versus ordinary video by polling a group of students to assess the content understandability, effectiveness and interaction of both the delivery methods.

Keywords : augmented reality, global warming, multiple markers, virtual buttons

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