

## Augmented Reality Sandbox and Constructivist Approach for Geoscience Teaching and Learning

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**Abstract :** Augmented reality sandbox adds new dimensions to education and learning process. It can be a core component of geoscience teaching and learning to understand the geographic contexts and landform processes. Augmented reality sandbox is a useful tool not only to create an interactive learning environment through spatial visualization but also it can provide an active learning experience to students and enhances the cognition process of learning. Augmented reality sandbox can be used as an interactive learning tool to teach geomorphic and landform processes. This article explains the augmented reality sandbox and the constructivism approach for geoscience teaching and learning, and endeavours to explore the ways to teach the geographic processes using the three-dimensional digital environment for the deep learning of the geoscience concepts interactively.

**Keywords :** augmented reality sandbox, constructivism, deep learning, geoscience

**Conference Title :** ICEIT 2017 : International Conference on Education and Information Technology

**Conference Location :** London, United Kingdom

**Conference Dates :** May 25-26, 2017