A 3D Game-Based Learning System for Land Administration Subjects

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SUMMARY

The students' feedback on the Land Administration Systems subjects often includes a desire for experiencing social, environmental, and economic issues related to land in a less theoretical manner. In response to this feedback, a game based 3D Virtual Environment called, Saving Earth, Populating Mars, has been developed for the Land Administration Systems subject at the University of Melbourne. In this 3D VE game, students gain knowledge to collect information about a country and analyse the information for designing and developing policy, workflow, databases, and information systems for land administration in that country.

This paper presents learning affordances of this 3D virtual environment (3D VE). The paper evaluates if and how the virtual environment enhances the learning experience of students. It has tested if a dynamic, close to reality, visually compelling and exciting experience enhances educational outcomes of the land administration subject. The results demonstrate a positive attitude to the integration of a 3D VE in students' learning in the land administration subject. It is noted that there are certain qualifications to the environment's effectiveness in the learning process, with the greatest being the game's level of development.