3D Virtual Gallery: Engaging Online Students with Simple VR Activities of Low-Cost
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This study is based on a VR experience successfully implemented in a traditional online course. 3D Virtual Gallery is a VR scenario where students of an online digital media course are invited to showcase their media creations on designated media boards located in the gallery. In the gallery, students can collaborate by reviewing their creations synchronically or asynchronously to their convenience, thus enhancing their experience regardless of existing constraints for synchronous interaction.

This study exploits the known learning benefits reaped by using 3D Virtual Reality Learning Environments 3D (VRLE) (Fowler, 2015) while showing students (mostly teachers) how to use simple and inexpensive open source VR technology to create engaging learning experiences.

In this empirical pilot study we surveyed 26 graduate students taking an online module on virtual reality incorporating a virtual experience developed using Open Simulator. 20 of them completed an online survey after the intervention.

Pearson correlation analysis and hierarchical regression analysis were used to explain if self-efficacy and the components of workload (mental demand, physical demand, temporal demand, performance, effort, and frustration) can be used in addition to presence to predict student’s engagement.
After answering the research questions, there are several practical questions that remain:

- Is desktop VR still relevant as teaching/learning tool? Is there a future for it?
- What type of learning scenario is more appropriate for this type of learning experiences?
- Can non-IT teachers truly build engaging learning scenarios with a few weeks of instruction?

Our students’ creations:

References