Can Virtual Reality applications in environmental geosciences enhance student engagement and learning?

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‘Virtual Reality is here to stay’ is a catchy phrase that garners over 7.6 million counts on Google, so should we ‘get used to it’ as a webpage entirely dedicated to VR applications emphatically declares? Virtual Reality (VR) is “a computer-generated artificial environment, presented to the user in such a way that the user suspends belief and accepts it as a real environment” (partial definition from Encyclopedia Britannica). The ‘Times Higher Education’ asked in a news piece in 2016 if VR could revolutionise higher education (2016) whereas ‘The Conservation’ was more assertive in an electronic article in early 2017 describing how virtual reality technology was (already) changing the way students learn. VR is just one of the many tremors that are shaking and upheaving the foundations of tertiary education systems through the introduction of information and communication technology. So is it indeed here to stay, should we ‘envision’ of a VR permeated teaching culture?

To find out about VR’s acceptability and potential for engagement and deeper learning, we acquired funding from a Curtin’s Teaching and Innovation grant which enabled us to develop a VR app and roll it out in a 3rd year undergrad environmental unit in the second half of 2018. A questionnaire at the end of the semester provided valuable feedback on student acceptance and thoughts.

Outcomes from this VR teaching ‘experiment’ will be shared with the audience including an outlook for the future of geoscience education.