

Interactive comment on “Volcanoes in video games: The portrayal of volcanoes in Commercial-Off-The-Shelf (COTS) video games and their learning potential” by Edward George McGowan and Jazmin Paris Scarlett

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Dear Authors, I welcome your paper that explore the educational potential of commercial off-the shelf (COTS) as a learning resource. It was interesting to read, offered new insights, covered an area I have not previously read about in the literature and most importantly got me thinking. I look forward to the second paper you mention in the introduction. The methodology is a simplistic evaluation but acts as a suitable vehicle for the papers discursive nature.

C1

Some questions that I feel that may enhance the papers overall aim of exploring the general potential of COTS for geoscience education.

1. You mention that COTS by their nature include some barriers to accessibility such as game cost. There are other in the same theme such as the cost of the console / device to run the game. Other barriers include age, as some of the games reviewed in this article have specific age guidance which could preclude them being used in specific educational settings. The cultural and social factors that influence gaming (perceptions of, use of etc.) are vast and beyond the scope of this article. However, they could be acknowledge as being important in the educational value of COTS video games. In its simplistic form familiarity with COTS or even the specific titles used in any educational initiative create ‘capital’ that alters the experience.

2. I feel that game play habits /dynamic offer a range of different perspectives on the potential of COTS videogames in this context. Game are typically solo or multi-player often with the presence of an online community as seen in MMORPG. Many of the commercially successful COTS video games of recent years have a strong online community that offers new opportunities for geoscience education. In the latter for example climate change scientists have used the game Fortnite to talk about climate issues with players whilst inclined in the game. In educational settings group and team play offers a different set of opportunities to solo play.

3. The authors expertise on volcanoes allows them to comment on the accuracy of the content of the games. A novice player is unlikely to have the capital to make these judgements. Therefore, consideration of not just the ‘could’ but the ‘how’ COTS can be utilised in education to provide the critical skills needed to make the judgements would be welcome.

4. The paper uses a range of examples of educational impact – I think further differentiation of the potential aligned to educational levels (primary, secondary, tertiary) and outreach activity may help clarify where the largest potential impacts lie.

C2

