

Improving Caribbean Undergraduates' Enjoyment, Engagement and Learning Using a 3D Role Playing Game

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Many students complain of being bored in traditional classrooms and yearn for the use of technology to enhance their learning. New media, such as video games, are engaging for many of these students therefore it is worthwhile to explore how these media can be effectively harnessed for learning. This paper presents the results of a study which investigated the use of a 3D role playing game (RPG) to teach Caribbean Undergraduates about the challenges of health management information systems (as a part of STEM training). At the end of the game playing activity, participants reported that they were fully engaged and enjoyed playing the 3D RPG. In addition, there were statistically significant differences in the pre- and post- test scores of the participants based on the cognitive levels examined. These results are important because there is a dearth of published research in the use of 3D RPGs in Caribbean classrooms.

Keywords: *Game-based learning, 3D role playing games, STEM, active learning, video games, learning tools*

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