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Using an Online Interactive Game to Enhance the Learning Outcomes for First Year Tertiary Students

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ABSTRACT

Academics acknowledge that students are often unable to link and extend first year, first semester foundation material throughout their undergraduate degree. The use of a pedagogically sound interactive digital game-based learning (DGBL) resource to engage first year biological science students in recalling, linking and applying foundation knowledge and increasing their learning outcomes has been explored. According to the current literature there exists no evidence that DGBL resources have previously been used to address this transfer and linking of knowledge and core skills. Results from our study of student perceptions and student learning outcomes suggest that our creatively designed resource has effectively targeted a mixed cohort of students to retain, link and extend foundation knowledge. Our study also indicates that DGBL resources have a valid role in enabling students, many of whom are classed as "digital natives", to demonstrate positive learning outcomes by successfully recalling and transferring unit content into new learning domains.

KEYWORDS

Interactive Game; Learning Outcomes; Tertiary, Life Sciences; Creative Design

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