



Practices, purposes and challenges in integrating gamification using technology: A mixed-methods study on university academics

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Abstract

Literature emphasizes that gamification significantly enhances students' engagement in learning and their motivation level. Studies have also examined the benefits of gamification in learning across different levels of education. However, the focus on academics' pedagogical understanding, knowledge, and skills and how they utilize these in planning and carrying out their gamified lessons particularly in the context of higher education, are not well researched. A mixed-methods study was conducted at a Malaysian public university with the aim of uncovering the practices, purposes, and challenges of integrating gamification via technology from the academics' perspective. Findings show the academics' practices of gamification could be further enhanced and their pedagogical considerations revolve around five main themes: (i) motivating students' learning; (ii) facilitating thinking skills and solving problems; (iii) engaging students' learning; (iv) facilitating interactions and (v) achieving specific teaching and learning goals. Based on the findings, the researchers proposed two models that would be able to facilitate and enhance academics' pedagogical knowledge and skills in integrating gamification for students' learning.

Keywords Gamification · Higher education · Private pedagogical theories · Pedagogical reasoning

1 Introduction

The widely accepted notion of 21st century education emphasizes learning that augments student-centeredness, creativity, communication, collaboration, critical thinking, and cultural awareness. These emphases, although could be achieved without

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