



Chapter 2

One Solution Does Not Fit All: Reward-Based and Meaningful Gamification in Higher Education

Minna-Maarit Jaskari

 <https://orcid.org/0000-0002-5412-7176>
University of Vaasa, Finland

Henna Syrjälä

 <https://orcid.org/0000-0002-1076-1108>
University of Vaasa, Finland

ABSTRACT

This chapter dives into the use of gamification in higher education, evaluating the benefits of gamification, such as increased student engagement and knowledge retention, while addressing concerns about its impact on intrinsic motivation. It discusses the transition from reward-based to meaningful gamification, aiming to propose ways to foster autonomy, competence, and relatedness among higher education students. Additionally, it explores student diversity in learning approaches and game-playing motivations, introducing a research-based tool for analyzing students' approaches to gamification. It discusses the practical application of gamification in higher education, focusing on balancing different gamification strategies to optimize learning through constructive alignment. This comprehensive exploration aims to equip higher education instructors with a thorough understanding of gamification's role and potential in creating memorable and meaningful learning experiences.

DOI: 10.4018/979-8-3693-0716-8.ch002

INTRODUCTION

The concept of play and the natural human attraction to games are used to enrich learning experiences in higher education (Kolb & Kolb, 2010; Kalmi, et al., 2020; Nicholson, 2015). Gameplay is more than just a fun source of entertainment; it has become a powerful educational tool that resonates deeply with human psychology. This is where gamification, defined as the use of game-design elements like points and badges in non-game contexts, comes into the picture (Deterding et al., 2011). Its importance has grown in a variety of sectors, including higher education (e.g., Hamari et al., 2014; Jaskari & Syrjälä, 2023; Lee & Hammer, 2011).

The increasing incorporation of gamification into pedagogy reflects its potential to foster behavioral change and engage learners. In recent years, empirical evidence has begun to shed light on the multifaceted benefits of gamification in education, ranging from higher student engagement to greater levels of knowledge retention (e.g., Dicheva et al., 2015; Hamari et al., 2014; Looyestyn et al., 2017). However, a lingering concern remains unaddressed: Will the introduction of reward-based gamification inadvertently dampen intrinsic motivation, reducing students to mere point collectors?

Such an outcome would be contrary to higher education's core goal of cultivating higher-order thinking skills such as critical and analytical reasoning. Furthermore, the enrolling students represent a variety of backgrounds, approaches to learning, and reactions to gamification (Jaskari & Syrjälä, 2023; Parpala et al., 2010). While gamification has the potential to tailor education to their diverse needs, it also presents challenges that must be carefully addressed.

This chapter dives into the world of gamification in higher education, beginning with the fundamentals of games and progressing to the various layers of gamification. It briefly discusses the self-determination theory as a theoretical background for most of the gamification applications. Then, the chapter focuses on the transition from reward-based gamification to meaningful gamification, with the goal of enriching education and connecting with students on a deeper level. It then discusses the differences between students from two perspectives: from approaches to learning and from gameplaying motivations. Based on that, this chapter introduces a research-based tool to help analyze students' approaches to gamification. The chapter then moves to the application of gamification in a higher education course context and discusses the balance between different ways to use gamification in order to foster learning.

In this way, this chapter aims to provide those in higher education with a comprehensive understanding of gamification's role in higher education, as well as equipping them with the knowledge to harness its potential to engage students in memorable and meaningful learning experiences.

26 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/one-solution-does-not-fit-all/340049

Related Content

Games in Education: Bibliometric Analysis

Menure Alk Küçükaydnand Burcu Durmaz (2022). *Handbook of Research on Acquiring 21st Century Literacy Skills Through Game-Based Learning* (pp. 13-30). www.irma-international.org/chapter/games-in-education/294917

User Experience and Learning Evaluation in Virtual Training of Critical Activities: Case of Live-Line Electrical Substation Maintenance

Klaus de Geus, Sergio Scheer, Alexandre Pereira de Fariaand Ricardo César Ribeiro dos Santos (2023). *Handbook of Research on Decision-Making Capabilities Improvement With Serious Games* (pp. 176-213). www.irma-international.org/chapter/user-experience-and-learning-evaluation-in-virtual-training-of-critical-activities/326421

The History of Stealth Assessment and a Peek Into Its Future

Valerie J. Shute (2023). *Games as Stealth Assessments* (pp. 1-23). www.irma-international.org/chapter/the-history-of-stealth-assessment-and-a-peek-into-its-future/333579

The Place of Gamification in the Educational Context

Jan Miškov (2022). *Handbook of Research on the Influence and Effectiveness of Gamification in Education* (pp. 1-22). www.irma-international.org/chapter/the-place-of-gamification-in-the-educational-context/308744

The Implementation of an Academic and Applied Esports Program in Higher Education: A Case of Diversity, Inclusion, and Building Community

Michele R. King, Karen G. Conner, Lindy L. Johnson, Terry Trojakand Tim Cho (2021). *Esports Research and Its Integration in Education* (pp. 186-209). www.irma-international.org/chapter/the-implementation-of-an-academic-and-applied-esports-program-in-higher-education/285091