Chapter 17 Gamification in Massive Open Online Courses After the Pandemic

Krzysztof Nesterowicz

https://orcid.org/0000-0001-5384-8206 Ludovika University of Public Service, Hungary

Ulkar Bayramova

https://orcid.org/0000-0002-7295-7835

State Agency for Science and Higher Education (EATDA), Azerbaijan

Tamás Szádeczky

https://orcid.org/0000-0001-7191-4924 Ludovika University of Public Service, Hungary

ABSTRACT

The pandemic impacted the landscape of massive open online courses (MOOCs) and how gamification was integrated into these platforms. This chapter presents some recent changes and adaptations observed in gamification within MOOCs: 1) Increased engagement strategies: MOOC platforms leveraged gamification elements more intensely to boost engagement. They incorporated features like badges, points, leaderboards, and progress bars; 2) Social interaction emphasis: the pandemic led to a surge in the desire for social interaction and community engagement. MOOCs incorporated gamified elements to encourage collaboration, such as team challenges or forums, fostering a sense of community among learners; 3) Personalised learning journeys: platforms started customising gamified elements to cater to individual learning styles and preferences; 4) Integration of advanced technologies: some MOOCs started exploring emerging technologies like augmented reality (AR) and

DOI: 10.4018/979-8-3693-2885-9.ch017

Gamification in Massive Open Online Courses After the Pandemic

virtual reality (VR) to gamify the learning experience further, offering immersive and interactive elements.

WHAT IS GAMIFICATION?

Gamification in education involves integrating game design elements into learning environments to engage and motivate learners. Gamification is the application of game-design elements, mechanics, and principles in non-game contexts to engage, motivate, and influence the behaviour of individuals. It involves incorporating game-like features into various activities, processes, or systems to make them more enjoyable, interactive, and rewarding (Dichev & Dicheva, 2017). Gamification aims to leverage the intrinsic motivation and engagement often associated with games to achieve specific objectives in fields such as education, marketing, business, and personal development. Nowadays, gamification is used in healthcare to promote engagement and adherence to depression treatment (Pfeiffer Salomão Dias et al., 2018). However, the benefits of gamification and education can complement one another, albeit not always the case. There are several important ways that gamification and education could exacerbate one another. Merging game components with education could be a combination that produces results that are particularly crucial for developing 21st-century abilities (Subagja et al., 2021).

Based on semantic analysis, Toda et al. (2019a) defined a set of 21 gamification elements that could be used in educational systems. After the initial definition, they designed an evaluation focusing on five variables:

- Comprehensibility: refers to how well-defined the name is for a group of game elements;
- Description: provides the definition or explanation of the concept;
- Relevance: indicates how important this element is within the larger structure or classification system;
- Examples: real-life instances or illustrations that clarify the concept;
- Coverage: refers to how well this concept represents the entirety of the game's taxonomy or classification system.

Later on, however, Toda et al. (2019) concentrated on elaborating on the ideas by providing instances of these elements' representations in literature and their benefits and drawbacks. Lastly, they suggested a new hierarchical classification for these components, which can assist developers and designers in deciding which elements to utilise while developing gamified strategies. To create this classification, five dimensions were identified, each linked to a different part of the environment. The

23 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/gamification-in-massive-open-onlinecourses-after-the-pandemic/352978

Related Content

Scaffolding Problem-Solving and Inquiry: From Instructional Design to a "Bridge Model"

Zvia Fund (2009). Handbook of Research on New Media Literacy at the K-12 Level: Issues and Challenges (pp. 216-242).

www.irma-international.org/chapter/scaffolding-problem-solving-inquiry/35916

Theory of Mind in Autistic Children: Multimedia Based Support

Tariq M. Khan (2011). Technology Enhanced Learning for People with Disabilities: Approaches and Applications (pp. 167-179).

www.irma-international.org/chapter/theory-mind-autistic-children/45509

Using Assistive Technology: Enabling All Children to Feel Capable and Connected in the Early Childhood Classroom

Rene Crow (2010). *Technology for Early Childhood Education and Socialization:* Developmental Applications and Methodologies (pp. 114-130). www.irma-international.org/chapter/using-assistive-technology/36625

Computer-Based Mathematics Education: Historical Excursus

(2021). Computer-Based Mathematics Education and the Use of MatCos Software in Primary and Secondary Schools (pp. 28-51).

www.irma-international.org/chapter/computer-based-mathematics-education/260134

Mobile Devices and Classroom Management: Considerations and Applications for Effective Use in an Elementary School Classroom

David Fuentes, Heejung Anand Sandra Alon (2015). *Tablets in K-12 Education: Integrated Experiences and Implications (pp. 64-74).*

www.irma-international.org/chapter/mobile-devices-and-classroom-management/113857