# LET'S PLAY A GAME: GAMIFICATION AS AN IMMINENT REQUIREMENT

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*Abstract.* This short paper provides a glance into gamification in higher education, highlighting its benefits and challenges. Gamification enhances engagement and motivation in learning context, but requires careful planning and resource investment. The paper emphasises the value of a thoughtful approach to implementation to ensure success and maintain intrinsic motivation.
*Keywords:* Gamification, higher education, games, educational games, serious games, storytelling

*Introduction.* Gamification is usually considered to be a process of applying game-specific concepts, such as various elements pertaining to the domain of games, as well as design techniques and game mechanics, to non-game contexts [1]–[4]. In other words, situated into the domain of education, gamification blends the essence of game design with educational contexts to create a captivating learning experience. It manifests through the use of game elements, mechanics, and dynamics in non-gaming environments, with the primary aim of increasing motivation, engagement, and understanding of complex concepts [5].

In general, the goal of gamification is to enhance user engagement and motivation, and to induce behaviour change in various non-gaming contexts. By utilising game-related elements and principles, gamification seeks to tap into the innate human desires for achievement, competition, and social connection [3, p. 129]. When applied to diverse domains such as public transportation [1], business, healthcare [6], and environmental conservation, gamification aims to foster desired behaviours, improve performance, and increase user satisfaction. The enchanting essence of gamification can transform mundane tasks or activities into captivating experiences, making them more appealing and enjoyable for the participants [1]. In doing so, gamification encourages motivation, sustained

involvement, and commitment, ultimately leading to achieving specific objectives tailored to the domain in which it is employed.

The goal of gamification in the domain of education is to transform the educational journey into a more immersive and enjoyable experience by incorporating elements [7, p. 20] like points, badges, leaderboards, quests, narratives, and others.

*Gamification in Education.* In the domain of education, gamification offers a myriad of benefits, by infusing the learning experience with elements of play. It empowers learners to take control of their educational quests, fostering motivation and engagement, a sense of autonomy and self-determination, achievement, and social interaction [5]. Furthermore, it is envisioned to provide instant feedback, allowing students to adjust their strategies and progressively improve their mastery of the subject course and its contents. The enchanting allure of gamification encourages curiosity and exploration [8], as learners delve into the intricate tapestry of knowledge woven by their educators.

Out of the following four basic elements that form a game [9, p. 53]: mechanics, story, aesthetics, and technology, it is argued here that the most important one in the context of gamification in education should be considered the story. Even though storytelling is one of the game elements that has not been widely researched yet [5], in the context of gamification, it is argued here to be one of the most important ingredients of a successful blend of gamification in education that provides students with a sense of purpose, motivation to join, experience, and pursue the prepared path or set of adventures, and the added value, when a gamified experience is compared to a non-gamified one. Furthermore, a good story acts as a kind of adhesive that connects all the envisioned elements of a planned system, and unites them in a single rich experience, as well as providing students with a guiding light that is designed to help them navigate the potentially complex challenges of learning and mastering theoretical concepts, solving complex problems, and conducting research.

The expected outcomes of using gamification in higher education are varied. Enhanced engagement and motivation lead to improved academic performance, as students are stimulated to conquer the challenges set before them. Ideally, collaboration and teamwork are encouraged as well, using specially designed quests, their tasks, and the accompanying story, supplemented by the appropriately employed game mechanics [10]. Ultimately, utilising gamification in higher education may help cultivate a generation of learners who are not only knowledgeable, but also passionate and curious about the world around them.

*Not Only Fun and Games.* Even though many benefits may be foreseen when a gamified educational system is envisioned, implemented, and employed, the benefits are not simply given. The amount of effort needed to plan, carry out, and put into action a successful gamified educational system demands a lot of effort and use of an approach that is not traditional, thus demanding of the educator additional time and other resources, even if the prospective system uses no elements of information and communications technology.

Furthermore, not all research is positive in the observed impact of gamification. Further research is necessary to establish the exact set of reasons why a gamified system implemented in higher education might fail to achieve optimal results, but the success rate of such a system is argued to be highly dependent on subjective experience, preferences, and the overall feeling originating from interacting with it. Moreover, the involved teacher is argued [5] to play a significant role in creating the experience, and affecting the impact, motivation, and perception of the implemented system.

*Conclusion.* This paper has touched upon the captivating world of gamification in higher education, exploring some of its benefits and potential challenges. The potential benefits are many, including enhanced student motivation, engagement, and mastery of subject matter, and fostered autonomy, collaboration, and competition. Many potential challenges exist as well, e.g. intrinsic motivation being overshadowed by competition and extrinsic motivators,

thus leading to a decline in long-term engagement, and the fact that the process of implementing a well-designed and effective gamified system can be resource-intensive, requiring significant investment in terms of time, expertise, and funding.

The implementation of gamification should be thoughtfully designed to complement and enhance the existing pedagogical landscape, rather than merely serving as an attractive veneer. With careful consideration and a focus on fostering a rich and meaningful learning experience, gamification holds the potential to revolutionise higher education.

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