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Gamifying Education: What Makes a Learning Experience Feel Like a Game?

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In recent years, educational settings have transformed the way students engage with the learning environment via gamification, aligning with the digital native generation. Rather than relying solely on traditional methods such as lectures and tests, gamification has become a powerful tool that incorporates game-like elements into the learning process to increase motivation, participation, and deeper understanding. Several key elements must be thoughtfully designed and implemented for gamification to be effective:



Gamification in Education

1. **Goals and Objectives**

Clear goals and objectives give students a sense of direction and purpose. In gamified education, these goals often take the form of missions, quests, or challenges, aligned with the learning outcomes of the chapter/topic. When learners understand what they're aiming for and see how each task contributes to the objective, their engagement and persistence increase. Accordingly, Duggal et al (2021) reiterated that the difference between the game and gamification lies in their objectives: while a game is oriented toward short-term goals, gamification is directed toward long-term goals.

2. **Rewards and Incentives**

A reward system can include points, badges, certificates, or virtual currency. It serves as an external motivator and can help track progress and celebrate students' achievements. Accordingly, Luo, Z. (2022) reiterated that points and badges have been identified as the most popular game elements.

3. **Feedback Mechanisms**

When players know whether they succeeded or failed a task instantly from real-time feedback, that helps them to adjust their strategies, correct errors, and build confidence. Several principles contribute to flow status, a state in which the users are so involved in something that they could even feel a reduced awareness of self or time, including the principle of immediate feedback (Luo, Z., 2022).

4. **Progression and Levels**

Structured progression through levels or stages motivates learners to keep moving forward. Each level may increase in difficulty and complexity, allowing students to build on previous knowledge. Unlocking new content or capabilities can create a sense of accomplishment and continuity. Most of the researchers considered progression and level as the crucial elements

because the lack of sense of these elements will decrease students' motivation and engagement. In addition, progress bars and levels serve as visible indicators for students to track their advancement, motivating them to gradually accomplish learning objectives (Aguilos & Fuchs, 2022).

5. **Competition and Collaboration**

Game mechanic consists of self-element, which focuses on self-achievement, and social element, which requires cooperation or interactive competition. Collaborative learning through team-based activities or cooperative missions helps students develop communication and problem-solving skills. Healthy competition, such as leaderboards or challenges, can increase motivation when used appropriately. Kalogiannakis, M., Papadakis, S., & Zourmpakis, A. I. (2021) found that the game elements and mechanics that were most used in gamified environments in science education were a competition.

6. **Narrative and Storytelling**

The element of narrative and storytelling will add context and emotional engagement in the gamification environment. The abstract concepts become more relatable and memorable; thus, students will get into the learning experience much like a video game storyline to captivates players. According to Christopoulos & Mystakidis (2023), an adeptly constructed narrative offers the potential to cultivate emotional resonance and player commitment, thereby inciting continued interaction and anticipation for unfolding events within the game.



References

- Aguilos, V., & Fuchs, K. (2022). The perceived usefulness of gamified e-learning: A study of undergraduate students with implications for higher education. *Frontiers in Education*, 7. <https://doi.org/10.3389/educ.2022.945536>
- Christopoulos, A., & Mystakidis, S. (2023). Gamification in education. *Encyclopedia*, 3(4), 1223-1243.
- Duggal, K., Singh, P., & Gupta, L. R. (2021, July). Impact of gamification, games, and game elements in education. In *Innovations in Information and Communication Technologies (IICT-2020). Proceedings of International Conference on ICRIHE-2020*, Delhi, India: IICT-2020 (pp. 201-210). Cham: Springer International Publishing.
- Kalogiannakis, M., Papadakis, S., & Zourmpakis, A. I. (2021). Gamification in science education. A systematic review of the literature. *Education sciences*, 11(1), 22.
- Luo, Z. (2022). Gamification for educational purposes: What are the factors contributing to varied effectiveness?. *Education and Information Technologies*, 27(1), 891-915.