

GAMIFICATION IN HIGHER EDUCATION: ENHANCING LEARNING THROUGH GAME-BASED STRATEGIES

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Abstract: *In recent years, gamification has gained significant attention as a strategy for enhancing teaching and learning across all educational stages. While some scholars express concerns regarding its ethical implications and potential drawbacks, most researchers highlight its capacity to create engaging, motivating, and enjoyable learning experiences. This paper explores the concept of gamification, its origins, and various definitions proposed by scholars, emphasizing its distinction from games and serious games. By integrating game mechanics, such as points, badges, leaderboards, and rewards, into non-game contexts, gamification aims to boost user engagement and learning outcomes. The study also examines critical factors influencing the effectiveness of gamification in higher education, including learner motivation, collaboration, and attitudes toward gamified experiences.*

Additionally, it addresses challenges such as cognitive manipulation, ethical concerns, and the potential for diminished learning outcomes. Almeida et al. (2023), for instance, conducted a systematic mapping study revealing that certain game design elements, like badges and leaderboards, can lead to negative effects such as decreased motivation and performance in educational software. They also noted ethical dilemmas, including the potential for cheating and manipulating the system.

A comparative analysis of theoretical frameworks, including those by Deterding et al. (2011), Werbach and Hunter (2012), as well as Huotari and Hamari (2012), provides insights into the diverse perspectives on gamification. The paper concludes by emphasizing the importance of careful design and implementation to ensure gamification serves as an effective tool for learning rather than a superficial or manipulative strategy.

Keywords: *gamified learning, game, serious game, gamification, game design elements*

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Introduction

Over the past decade, the integration of digital games into education has gained widespread attention as a means of improving teaching and learning at various levels. Scholars hold diverse perspectives on the gamification of learning, with some raising concerns about its ethical implications and potential drawbacks (Almeida et al., 2023). Critics argue that issues such as cognitive manipulation, unintended motivational consequences, and the risk of superficial engagement must be carefully considered. However, a significant body of research (Deterding et al., 2011; McGonigal, 2011; Huotari & Hamari, 2012) supports the idea that gamification fosters engagement, motivation, and enjoyment in educational settings. By applying game mechanics, gamification has the potential to transform learning experiences, making them more interactive and rewarding for students.

The concept of *gamification* originated in the digital media industry, with its first documented use in 2008. It gained widespread attention in 2010 through industry events and discussions (Deterding et al 2011).

In academic circles, there has been limited effort to establish a formal definition of gamification. While some definitions exist, they often present a variety of viewpoints, covering topics from engagement and experience design to problem-solving and educational uses. For instance, McGonigal's interpretation emphasizes how gamification can enhance user involvement in routine or monotonous tasks, making them more engaging and fulfilling (McGonigal, 2011).

Huotari and Hamari (2012) define gamification as the process of enhancing a service with features that support game-like experiences, ultimately contributing to the creation of value for users. Their approach is service-centered, highlighting how gamification delivers value by creating engaging and meaningful experiences for users.

Zichermann and Cunningham (2011) focus on the problem-solving and engagement potential of gamification, pointing out that game strategies can be leveraged to tackle real-world issues. Werbach and Hunter (2012) describe gamification as the incorporation of game elements and design techniques into non-game contexts, emphasizing its relevance in educational settings and various other fields. Similarly, Deterding and colleagues note the integration of specific elements of game design, such as mechanics, dynamics, and aesthetics, into non-game environments. They argue that gamification is more about selectively applying game features, rather than converting an entire environment into a game. Deterding's definition, "Gamification is the use of game design elements in non-game contexts," remains one of the most significant in the field. This definition differentiates gamification from the development of serious games or simulations,

which are fully structured as games from the outset. Instead, gamification subtly incorporates game-like elements into existing structures, ensuring that the original goals, such as learning or productivity, remain intact. Additionally, they stress the need for game mechanics to align with user goals to ensure gamification's success. If executed poorly, gamification can appear superficial or manipulative, highlighting the importance of understanding both the context and the target audience.

Some scholars report challenges in gamified learning, such as ineffective outcomes, decreased performance, motivational issues, and ethical dilemmas like cheating and manipulating the system (Almeida et al., 2023). They point out difficulties related to power dynamics, a lack of voluntary participation, cognitive manipulation, and social comparison, urging designers to carefully consider these aspects when implementing gamified learning tools (Zvereva et al., 2023).

When evaluating how effective games are for learning, it is not just about checking if students learned something. You also need to assess things like how motivated they were, their attitudes, and their overall experience with the game. This gives a more complete picture of whether the game works as a learning tool.

Connolly, Stansfield, and Hainey (2007) identify seven critical factors to consider when evaluating the impact of digital games on learning: **(1) Learner Performance**, which examines whether students gain knowledge and improve their skills; **(2) Motivation**, focusing on students' engagement and interest during gameplay; **(3) Perceptions**, addressing students' views on the game, such as its enjoyment, realism, and usability; **(4) Attitudes**, exploring how both students and teachers feel about the subject matter and the use of games in education; **(5) Collaboration**, assessing the game's ability to foster teamwork; **(6) Preferences**, analyzing learners' and teachers' favorability toward the game's style; and **(7) Environment**, evaluating the game's design, usability, and suitability for learning contexts.

De Freitas and Oliver (2006) broaden this framework by considering the context in which learning occurs, the learner profile (background and characteristics of the students), the teaching methods employed, and the game design, focusing on elements like interactivity, realism, and immersion.

Similarly, Whitton (2007) proposes six features that make games effective learning tools: active learning through problem-solving and collaboration, engagement via challenges and interactive environments, relevance to the curriculum and learners' needs, reflection on acquired knowledge, inclusivity for diverse learning levels and styles, and support through guidance during gameplay.

Ultimately, the primary goal is to assess whether the game improves learning outcomes and to evaluate its overall effect on students' experiences, including both its advantages and possible disadvantages.

According to Whitton (2014), the study of games and learning encounters challenges similar to those faced by other educational approaches, particularly in assessing learning outcomes in a meaningful way. These efforts are further complicated by ethical concerns and the practical difficulties of conducting large-scale studies, which makes it challenging to establish conclusive evidence of their effectiveness. The author illustrates this with an example: we lack definitive evidence that traditional lecture-style teaching is the most effective learning method. Indeed, there is growing evidence against it, yet it continues to dominate education at all levels. While digital games have clear potential to enhance learning and engagement, their success is far from guaranteed, as numerous factors influence educational outcomes. Therefore, the critical question is not whether games can support learning, but rather how they can be optimized for maximum impact, cost-efficiency, and widespread acceptance, allowing them to truly revolutionize teaching and learning practices.

Thus, most scholars state that gamification aims at creating engaging, motivating, and enjoyable experiences for users by applying the intrinsic and extrinsic motivational strategies commonly found in games.

Hence, to fully understand the essence of gamification, it is essential to make a differentiation between the terms **game**, **serious game**, and **gamification**.

Games are structured forms of play that are typically undertaken for entertainment but can also serve educational or social purposes (Salen and Zimmerman, 2004).

Games involve rules, objectives, challenges, and outcomes. They are designed for entertainment, with a primary focus on creating enjoyable and immersive experiences. However, games can be used for educational purposes, e.g. in language learning, but it is not their primary goal, of course. Such games as Duolingo Stories or Word Games: word puzzles, crosswords, or apps like Scrabble encourage players to form words in a fun, competitive manner while improving their vocabulary. They are designed to entertain rather than teach.

Serious Games are games explicitly designed with a primary purpose other than entertainment, such as education, training, or awareness-building. (Michael and Chen, 2006) Serious games blend entertainment with an educational or practical objective, using game mechanics to engage users in tasks or learning processes, e.g. games like *Influent* or *Immersionia* place players in virtual

environments where they interact with objects and characters in a target language, practicing vocabulary, grammar, and cultural nuances.

Unlike games and serious games, gamification does not create a complete game. Instead, it enhances an existing system by applying game-like features. As demonstrated by the definitions of gamification, it involves integrating game design features, such as points, badges, leaderboards, and rewards into non-gaming environments to inspire and engage users, to motivate learners to consistently practice a language, turning a learning activity into an engaging process.

Aspect	Games	Serious Games	Gamification
Primary Purpose	Entertainment	Education, training, or awareness	Motivation and engagement
Design	Complete games with rules/goals	Games designed for learning	Non-game systems with game elements
Examples	Scrabble, Wordle	Influent, Immersia	Duolingo's streaks and badges
Focus	Fun and immersion	Educational outcomes	Engagement through rewards

Figure 1 Comparison of Concepts

As shown in the chart, the concepts of **games**, **serious games**, and **gamification** each serve distinct but complementary roles in enhancing learning experiences; and understanding their differences is essential for effectively applying them in educational contexts.

To sum up, **games** offer incidental learning through entertainment, where educational benefits arise naturally from interaction and immersion within the game. However, education is not the primary goal. **Serious games** are intentionally designed to teach and achieve specific learning outcomes, blending fun with purposeful learning. They focus on solving real-world problems through game-based environments. **Gamification** enhances non-game activities by applying game-like elements, aiming to increase motivation and engagement without fully transforming the activity into a game. The focus here is on making the learning process more engaging, often in contexts like classrooms or online platforms.

In an EFL (English as a Foreign Language) classroom, gamification can be particularly effective in creating a fun, interactive, and rewarding learning environment. Below, we will explore the core strategies of gamification and discuss how they can be implemented to improve student engagement and learning in the EFL context.

By integrating such **gamification strategies** as point systems; levels and progression; badges and leaderboards; and quests or challenges — teachers can

create an engaging and motivating EFL classroom that fosters both extrinsic (Motivation driven by external rewards or pressures) and intrinsic motivation (motivation that comes from within, driven by personal satisfaction or enjoyment of the activity itself).

Kapp (2012) emphasizes the importance of **points** in gamification, as well as notes that **badges** and **leaderboards** help tap into students' desire for extrinsic motivation, providing clear external rewards for effort and achievement. Kapp claims that rewards can motivate learners to perform better and keep them engaged in the learning process. Point systems are one of the most common and fundamental gamification elements. In a point system, students earn points for completing tasks, answering questions correctly, or achieving specific learning goals. Points act as rewards for performance and provide immediate feedback, encouraging students to stay engaged and motivated. Badges and leaderboards, on the other hand, are common game elements used to acknowledge achievements and encourage friendly competition. Badges are awarded when students perform specific tasks, while leaderboards display student rankings based on their achievements. For example, students can earn badges for achievements such as:

- ✓ Completing a certain number of vocabulary quizzes.
- ✓ Speaking in English for a set amount of time during class activities.
- ✓ Correctly using a target grammar structure in conversation.

Rank	Student's name	Points	Achievements (Special badges)
1	Sarah Johnson	950	Master Problem Solver □
2	Alex Simson	870	Quiz Champion □

Figure 2 A leaderboard chart that could be used in a gamified classroom.

The format of this leaderboard can be adapted for various contexts (like adding more columns for specific tasks or progress metrics). It is important to note that leaderboards like this are motivational for some but should be designed carefully to avoid discouraging lower-ranked participants.

Werbach and Hunter (2012) state that **progression** can enhance engagement, as learners feel more invested in reaching the next level, mirroring the experience of progressing through a game. They also suggest that other strategies such as **challenges** in gamification offer students clear objectives, much like the quests in games, motivating them to engage deeply with the material.

Thus, **Levels** and **Progression** (tracking student development) strategy allows students to see their advancement in a task or subject over time. Each level typically builds on the previous one, presenting new challenges and requiring

students to demonstrate mastery of skills to move forward. Teachers can create a “leveling system” where students must complete certain tasks or achieve a specific score to “level up” to the next stage. For instance:

- Level 1: Basic vocabulary recognition (e.g., flashcards, simple word-matching).
- Level 2: Use vocabulary in sentences (e.g., sentence construction tasks).
- Level 3: Use vocabulary in conversations (e.g., role-play or discussions).

Quests or Challenges (task-based gamified activities): these are task-oriented gamified activities designed to engage students in achieving specific learning goals. These can range from simple tasks to more complex, long-term assignments.

In EFL classroom, for example, a teacher might design a quest where students need to complete a series of tasks, such as:

- ✓ Learning and using 10 new vocabulary words in conversation.
- ✓ Watching a video in English and answering comprehension questions.
- ✓ Writing a short story using target grammar structures.

These could be individual or group challenges, like:

- ✓ A “Grammar Challenge” where students compete to complete grammar exercises in the shortest time.
- ✓ A “Conversation Challenge” where pairs of students engage in a role-play or discussion, and the best performances receive rewards.

Overall, points encourage students to participate in activities, knowing they will earn rewards for their contributions. In other words, points can serve as an ongoing visual representation of student progress. Badges serve as tangible symbols of success, motivating students to complete tasks, whereas leaderboards can encourage students to improve their performance to outpace peers, fostering both motivation and engagement, i.e. students must master one set of skills before advancing to more difficult tasks, reinforcing their learning. Moving to higher levels offers students a sense of accomplishment and motivates them to continue progressing. Quests provide students with specific tasks to accomplish, which enhances focus and motivation. Some quests can be designed for teams, encouraging students to work together, fostering collaboration and peer learning.

In addition to the strategies for incorporating gamification into English as a Foreign Language (EFL) classrooms, we would like to introduce several digital tools that facilitate this integration by providing interactive and game-like experiences. Below are some notable platforms:

✓ **Kahoot!** or **Quizizz**: teachers can create quizzes that test students on new vocabulary words, providing immediate feedback and reinforcing learning.

Kahoot! is a widely used platform that allows educators to create interactive quizzes and surveys. The competitive nature of Kahoot! motivates students to participate actively, and the immediate feedback helps reinforce learning.

Similar to Kahoot!, Quizizz enables teachers to create quizzes that students can complete at their own pace. This asynchronous format is particularly beneficial for homework assignments. This tool offers features like memes and leaderboards, adding a fun element to assessments. Studies have shown that Quizizz and Kahoot enhance student motivation and provide valuable insights into individual and class-wide performance.

Platforms like **Classcraft** can be utilized to set up quests (or challenges) where students complete exercises to earn points, making the learning process more engaging. Teachers can set up quests related to language learning objectives, such as vocabulary challenges or grammar missions. This tool is used to transform the classroom into a role-playing game where students earn points for positive behaviors and academic achievements. This approach fosters collaboration and a sense of community among students. Classcraft's game mechanics encourage students to engage with the material and each other in meaningful ways.

Another tool, such as **Padlet** is a versatile platform that allows students to collaborate on digital boards. In EFL settings, Padlet can be used for group projects, brainstorming sessions. It can serve as a space for students to post summaries or reflections on reading assignments. The interactive nature of Padlet encourages students to contribute ideas, comment on peers' posts, and engage in discussions, thereby enhancing language skills in a collaborative environment.

By integrating these tools into EFL classrooms, educators can create a dynamic and interactive learning environment that motivates students and enhances their language proficiency.

To better grasp the main purpose and strategies of gamification, let us consider the following scenario of a serious game and observe how it can be transformed from a game into a gamification, investigate the main differences of those two phenomena on a concrete example.

Here is the scenario role played by 3rd year students on the topic: “The Impact of Norman Conquest on the English Language and Culture”.

Scenario: The Norman Conquest – Innovators vs Critics

The year is 1087, a year after the Domesday Survey, and tensions remain high in England following the Norman Conquest. A debate has been organized in the court of King William I to evaluate the impact of Norman rule.

The audience consists of nobles, scholars, clergy, and common folk representatives.

Two teams, Innovators and Critics, will present their cases to argue whether the Norman Conquest has been beneficial or detrimental to England.

Roles and responsibilities moderator:

- Role: Neutral party responsible for introducing the debate, ensuring the rules are followed, and guiding the flow of the discussion.
- Responsibilities:
 - Introduce the topic, participants, and format.
 - Transition between speakers and sections.
 - Conclude the debate with a summary of key points.

Team 1: The Norman Innovators (proponents of the Norman Conquest)

Each team member will take on a specific persona that highlights a positive aspect of Norman rule.

1. Norman Chronicler (Student 1):
 - Topic: The Battle of Hastings
 - Role: Historical narrator explaining the strategic brilliance and significance of William's victory.
2. Feudal Scholar (Student 2):
 - Topic: Introduction of Feudalism
 - Role: Advocate for the stability and organization brought by the feudal system.
3. Domesday Expert (Student 3):
 - Topic: The Domesday Book
 - Role: Proponent of the administrative and economic benefits of the Domesday Survey.
4. Norman Architect (Student 4):
 - Topic: Norman Castles
 - Role: Promoter of the castles as symbols of strength, security, and administrative control.
5. Norman Architect (Student 5):
 - Topic: Norman Religious Architecture
 - Role: Supporter of the architectural advancements seen in cathedrals and churches.
6. Norman Legal Scholar (Student 6):
 - Topic: Legal Reforms
 - Role: Advocate for the legal changes that established order and justice.

7. Norman Linguist (Student 7):
 - Topic: Norman French and the Elite
 - Role: Discusses the cultural refinement and influence brought by Norman French.
8. Norman Linguist (Student 8):
 - Topic: Development of Middle English
 - Role: Celebrates the enrichment of the English language through Norman influence.

Team 2: The Norman Critics (opponents of the Norman Conquest)

Each team member will highlight the negative consequences of Norman rule from their perspective.

1. Anglo-Saxon Chronicler (Student 9):
 - Topic: Critique of the Battle of Hastings
 - Role: Highlights the destruction and suffering caused by the Norman invasion.
2. Feudal System Critic (Student 10):
 - Topic: Feudalism Issues
 - Role: Argues against the social inequalities imposed by the feudal system.
3. Domesday Critic (Student 11):
 - Topic: Negative Impact of the Domesday Book
 - Role: Criticizes the Domesday Survey as a tool for control and exploitation.
4. Cultural Displacement Critic (Student 12):
 - Topic: Norman Castles
 - Role: Argues that castles were symbols of oppression rather than protection.
5. Cultural Preservationist (Student 13):
 - Topic: Norman Religious Architecture
 - Role: Opposes the erasure of Anglo-Saxon culture through Norman church designs.
6. Legal Critic (Student 14):
 - Topic: Critique of Legal Reforms
 - Role: Argues that the new laws benefited Normans at the expense of native English people.
7. Linguistic Critic (Student 15):
 - Topic: Linguistic Divide

- Role: Discusses the cultural alienation caused by the linguistic gap between Normans and English.
8. Linguistic Preservationist (Student 16):
- Topic: Negative Linguistic Changes
 - Role: Highlights the loss of traditional English expressions due to Norman influence.

Flow of the Debate

1. Introduction by Moderator: Sets the stage, introduces the topic, and explains the debate format. 2. Team 1 Presentations (Innovators): Each speaker presents their topic, supported by slides and visuals.

3. Team 2 Presentations (Critics): Each speaker responds with a critique of the corresponding topic. 4. Conclusion by Moderator: Summarizes key arguments and thanks participants.

This scenario is best categorized as a **Serious Game (SG)**. The characteristics of Serious Game (SG) in the Scenario are as follows:

- The primary goal is education — students learn about the Norman Conquest, its consequences, and the complexities of historical analysis through role-playing and debate. Students take on specific characters (e.g., Norman Chronicler, Feudal Scholar) with defined roles and responsibilities that tie directly to the learning objectives.
- The structured debate engages students in critical thinking, research, and collaboration. They actively explore both positive and negative aspects of the Norman Conquest. Beyond learning history, the activity fosters soft skills like public speaking, argumentation, teamwork, and perspective-taking.
- The debate simulates a historical event (a court discussion during King William I's time), making it interactive and engaging, while still serving an educational purpose.

Though the competition and awards introduce elements of gamification, the core structure and purpose of the activity are still more aligned with a **serious game**. Let us explain why: despite the gamification layer, the primary mechanism of the activity is the role-playing debate where students learn through gameplay. This makes it fundamentally a **serious game** because the scenario involves gameplay elements like adopting personas, engaging in a narrative-driven activity, and simulating historical events. These are the hallmarks of serious games. Though the competitive framework and rewards are peculiar to gamification (**GF**), this scenario is primarily a **serious game (SG)**. It is not uncommon to see such hybrid

approaches where serious games use gamification techniques to further motivate participants.

To transform this **serious game scenario** into a **gamification scenario**, we would remove some role-playing game mechanics and focus on integrating **gamified elements** into the learning process.

The objectives of the gamified scenario are:

- understand the impact of the Norman Conquest,
- explore historical, cultural, social, and economic perspectives,
- foster debate and critical thinking.

Students participate in a competitive, point-based system to explore and learn about the Norman Conquest. Instead of role-playing characters, the focus is on completing tasks, answering questions, and solving challenges, like Bonus activities (e.g., solving puzzles or creating infographics) that allow students to earn extra points.

Each role is turned into an avatar or character with unique abilities, “skills,” and “resources” that can influence the debate. For example, the *Norman Chronicler* might have a “Persuasion Boost” skill to sway audience opinions.

Each team works as a faction competing to win the King’s favor through the debate. Players are encouraged to collaborate. Players start as “Novice Debaters” and can level up to “Master Historians” based on their performance and accumulated points. Medieval-themed visuals, animations, and sound effects can be used to immerse players in the Norman court setting, e.g. students can earn points with a “scroll” unrolling animation or hear applause when a strong argument is made.

To gamify the debate scenario effectively, rewards must be introduced alongside the points system. Both individual and team scores should be visible throughout the debate, creating an ongoing sense of engagement. Students accumulate points based on their participation and performance in various activities within each module, such as quizzes, debates, and creative projects. Points can be awarded individually, recognizing personal achievements, or assigned to teams to promote collaboration and collective problem-solving.

By rewarding contributions and performance with points, the system fosters a sense of ownership over the learning process, prompting students to apply themselves more fully to their tasks. In addition to individual motivation, the system cultivates friendly competition among students, pushing them to strive for excellence and setting clear benchmarks for success. This competitive element not only keeps students invested but also enhances their critical thinking, as they seek

to outdo one another in making compelling arguments and demonstrating mastery of the content.

In the context of the gamified *Norman Conquest debate scenario*, a **leaderboard** would track and highlight individual performance. Students earn points through specific actions and contributions during the debate. Each criterion is directly tied to the player's performance, ensuring that the system is transparent and reflective of their engagement. Examples of criteria for awarding points could include:

Presentation Performance:

- Delivering a well-researched, impactful argument: **+10 points**
- Creativity and role-play during presentation: **+5 points**
- Using historical references effectively: **+5 points**

Effectiveness of Counterarguments:

- Successfully countering an opponent's argument: **+10 points**
- Introducing an unexpected but valid historical fact: **+5 points**
- Using persuasive delivery in the rebuttal: **+5 points**

Audience Engagement (Voting Results):

- Winning audience votes for their argument: **+10 points**
- Partial audience approval (e.g., impressing one group like the nobles or commoners): **+5 points**

Team Collaboration and Strategy:

- Collaborating effectively within the team (e.g., passing "Wild Cards" or assisting a teammate): **+5 points**.

To keep players engaged, graphics can be used to highlight top performers, for example:

Rank	Name	Total Score (All Rankings Combined)	Final Title
1	Ruzanna	32 (12+10+10)	Debate Champion <input type="checkbox"/>
2	Martha	31 (11+10+10)	Consistency Queen <input type="checkbox"/>
3	Ann	30 (9+11+10)	King's Advisor <input type="checkbox"/>

To heighten the sense of competition and recognition, individual and team rankings should be prominently displayed on leaderboards throughout the debate. These leaderboards can serve as both a visual and motivational tool, offering students immediate feedback on their progress and performance. The rankings should be broken down into key components that highlight both personal achievements and team efforts, allowing students to see how their individual

contributions are impacting their overall position, while also reflecting the collective success of their teams.

To keep the momentum going and sustain excitement throughout the debate, the leaderboards should be updated in real time. As points are awarded for different actions, such as delivering strong arguments, countering rebuttals effectively, or engaging with the audience, students can see their rankings change instantly, providing them with an immediate sense of progress or areas for improvement. This dynamic approach to tracking success helps to maintain a competitive atmosphere and fosters continuous motivation, as students are able to compare their standings with others in real time, sparking further efforts to improve.

In this way, the point-based system, coupled with real-time updates on individual and team rankings, creates a vibrant, interactive environment that drives both personal achievement and teamwork. It ensures that students remain motivated, engaged, and constantly striving to elevate their performance throughout the course of the debate, making the entire learning experience more engaging and rewarding.

It is worth mentioning that **badges** add more excitement to the process of gamification. Students earn themed badges for excelling in specific topics, for example:

- “Master Strategist” (for effective debate strategies).
- “Charismatic Speaker” (for exceptional delivery).
- “Historical Expert” (for deep historical knowledge).

However, it is important to acknowledge certain drawbacks of gamification. While competition can be a powerful motivator, it can also lead to unintended negative outcomes. Some students may become overly focused on outperforming their peers, resulting in a high-pressure environment that could harm self-esteem and hinder collaboration. This competitive nature could discourage risk-taking or limit participation, particularly for students who are less confident or unfamiliar with gamified dynamics, thereby impacting their overall learning experience.

Additionally, if not carefully implemented, gamification can introduce unnecessary complexity into the learning process. Points, leaderboards, and rewards should always align with the learning objectives to avoid distraction from the core educational goals. Otherwise, gamification risks turning the educational experience into a game-like experience that may detract from meaningful learning.

Finally, the long-term effectiveness of gamification as an educational strategy remains an open question. While it may be effective in engaging students in the short term, gamification might not sustain student interest in the long run. Without

consistent motivation and the right balance of rewards and learning strategies the aim of gamification will not be fulfilled.

Conclusion

In conclusion, a nuanced understanding of the distinctions between games, serious games, and gamification is essential for educators and instructional designers in selecting the most suitable approach to meet their educational objectives. Whether utilizing games for incidental learning, employing serious games for targeted educational purposes, or integrating gamification strategies to boost student engagement and motivation, these methodologies can significantly contribute to the creation of more dynamic, interactive, and effective learning environments. However, it is crucial for educators to exercise caution in their implementation. The overuse or inappropriate application of these approaches may lead to potential drawbacks, such as diminishing the intrinsic value of the learning experience, distracting from core educational goals, or fostering unhealthy competition. Therefore, a balanced and thoughtful integration of these strategies, with careful alignment to specific learning outcomes, is key to ensuring that gamification and related techniques remain beneficial, sustainable, and conducive to long-term academic success.

Ultimately, gamification in educational settings, particularly through structured debates, provides an opportunity to transform traditional learning environments. It shifts the focus from passive learning to active participation, making education more interactive, motivating, and rewarding. This not only enhances student engagement but also delivers a richer, more immersive educational experience. As this method continues to evolve, it holds the potential to revolutionize how students approach historical content, debate, and other subjects, turning learning into a fun and effective journey.

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Ա. Գալստյան – Խաղացվածքային մոտեցումը բարձրագույն կրթության ոլորտում. Կրթության խթանումը խաղային ռազմավարության միջոցով. – Վերջին տարիներին խաղացվածքը (gamification) ներդրվել է կրթական բոլոր փուլերում՝ համարվելով ժամանակակից ուսուցման ռազմավարություններից մեկը: Չնայած որոշ գիտնականների բացասական կարծիքներին, այս մեթոդը հաջողությամբ կիրառվում է ուսուցիչների կողմից՝ որպես սովորողների

ներգրավելու, մոտիվացնելու, և դասապրոցեսը հետաքրքիր դարձնելու միջոց: Սույն հոդվածում քննարկվում է գիտնականների կողմից առաջարկվող տարբեր սահմանումներ՝ ընդգծելով խաղացվածքի տարբերությունը խաղերից և լուրջ խաղերից: Խաղերի մեխանիզմների՝ միավորների, տարբերանշանների, առաջադիմության աղյուսակների և պարզների ներմուծումը խաղից դուրս համատեքստերում, այսինքն դասապրոցեսում, նպատակ ունի խթանելու սովորողների ներգրավվածությանը ուսումնական գործընթացին և բարելավելու ուսուցման արդյունքները:

Հոդվածն անդրադառնում է նաև բարձրագույն ուսումնական հաստատություններում խաղացվածքի արդյունավետության կարևոր կողմերին՝ ներառյալ ուսանողների մոտիվացիայի բարձրացումը, համագործակցությունը և քննադատական մտածողության զարգացումը: Ավելին, այն ներկայացնում է նաև այն խնդիրները, որոնք կարող են առաջանալ այս մեթոդի ոչ ճիշտ կիրառման դեպքում: Եզրակացությունն այն է, որ խաղացվածքը կարող է դառնալ արդյունավետ ուսուցման գործիք միայն ճիշտ ռազմավարության դեպքում:

Բանալի բառեր. խաղացվածք, խաղ, լուրջ խաղ, խաղացվածքային ուսուցում, խաղային ռազմավարություն

А. Галстян – Геймификация в высшем образовании: повышение эффективности обучения с помощью игровых стратегий. – В последние годы геймификация привлекает значительное внимание как стратегия повышения качества преподавания и обучения на всех уровнях образования. Хотя некоторые учёные выражают обеспокоенность её этическими последствиями и возможными недостатками, большинство исследователей подчёркивают её способность создавать увлекательный, мотивирующий и приятный учебный опыт. В данной работе рассматривается понятие геймификации, её происхождение и различные определения, предложенные учёными, с акцентом на отличие геймификации от игр и серьёзных (serious) игр. Путём интеграции игровых механик – таких как очки, значки, таблицы лидеров и награды – в неигровые контексты геймификация стремится повысить вовлечённость пользователей и учебные результаты. Исследование также анализирует ключевые факторы, влияющие на эффективность геймификации в высшем образовании, включая мотивацию обучающихся, сотрудничество и отношение к геймифицированному опыту.

Кроме того, работа затрагивает проблемы, такие как когнитивная манипуляция, этические соображения и потенциальное снижение учебных результатов. Так, например, Алмеида и соавторы (2023) провели систематическое картографическое исследование, показавшее, что некоторые элементы игрового дизайна, такие как значки и таблицы лидеров, могут приводить к негативным эффектам – снижению мотивации и успеваемости в образовательном программном обеспечении. Они также

отметили этические дилеммы, включая возможность списывания и манипулирования системой.

Сопоставительный анализ теоретических работ Детердинга и соавторов (2011), Вербаха и Хантера (2012), Хуотари и Хамари (2012) даёт представление о различных подходах к геймификации. В заключение подчёркивается важность тщательного проектирования и внедрения, чтобы геймификация служила эффективным инструментом обучения, а не поверхностной или манипулятивной стратегией.

***Ключевые слова:** геймифицированное обучение, игра, серьёзная игра, геймификация, элементы игрового дизайна*