Digital Gamification Boosts Motivation and Engagement in EFL Classrooms

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Abstract. General Background: Digital gamification has become a prominent approach in technology-supported language learning environments. Specific Background: In Uzbekistan, despite classroom phone restrictions, educators increasingly use tools such as Quizizz, Kahoot, and Jeopardy to support English as a Foreign Language instruction. Knowledge Gap: However, uncertainty persists regarding whether such tools strengthen learner involvement or divert attention and reduce critical thinking. Aims: This study investigates the role of digital games in shaping undergraduate students' motivation, participation, and cognitive engagement in EFL classrooms. Results: Using mixed methods with 68 students and 21 teachers, findings show high levels of learner interest (M=4.32), participation (M=4.15), and collaborative interaction (M=4.48), while reported distraction remained low (M=2.11). Teachers confirmed increased participation and learner interest, although moderate concern regarding critical thinking was noted (M=3.12). Qualitative data revealed active collaboration, emotional involvement, and minimal off-task behavior when clear instructions were provided. Novelty: The study provides context-specific empirical evidence from Uzbekistan, highlighting both pedagogical advantages and practical constraints, including limited internet access and varying digital literacy. Implications: The findings suggest that structured integration of digital games, supported by teacher training and infrastructure improvement, can foster interactive and participatory language learning environments without significantly compromising cognitive development.

Keywords: Digital Games, Learner Engagement, EFL Classrooms

1 Introduction

Today's education has been transformed into a tech-friendly zone. In this zone digital tools, especially, games are welcomed as they will eliminate the need for traditional board or card games which took teachers ages to prepare for the classroom use. Digital gamification has gained popularity in teaching EFL as a tool to increase student involvement and motivation. Learning a foreign language and using it for communication is not as easy as it seems. Krashen's [1] Affective Filter Hypothesis states that low self-confidence and lack of motivation can hinder language acquisition by building a mental block. Hence, it is crucial to create a supportive and low-anxiety atmosphere. Building on this theory, incorporating digital technology into teaching can facilitate lower the affective filter by providing a less daunting and more entertaining learning experience.

R. Lomotey et al. (eds.), *Proceedings of the 1st International Conference on Communication and Digital Multimedia 2025 (ICCDM 2025)*, Advances in Social Science, Education and Humanities Research 1020,
https://doi.org/10.2991/978-2-38476-589-8_59

However, in spite of its numerous advantages, digitalized education remains untapped in many classes in Uzbekistan. One of the most stated reason has been a governmental decree on measures to regulate the use of mobile phones in educational institutions of the Republic of Uzbekistan (Resolution No 139 of the Cabinet of Ministers of the Republic of Uzbekistan) since it was adopted in 2012.

Though using cell phones or smartphones is prohibited during the lesson, Uzbek EFL teachers in higher education systems often incorporate these tools for educational purposes, indicating both the prospects and poor prospects of technology use in learning. Even though digital games can encourage learner participation and emotional engagement, there are still concerns about possible distractions and the impact on critical thinking skills. Tran Duy Khiem [2] argues that "it is noticeable that digital games, especially online games, does not attract serious attention within the context of L2 learning and teaching in higher education, and this can be explicable on the basis that the current prevalent attitude of the public towards digital games has been emphatically negative for the reason that digital games are associated with various problematic behaviors among young people ". Understanding these effects is essential for effective pedagogical integration.

This study examines how digital games influence motivation, engagement, and learning outcomes among undergraduate students at the Foreign Languages Faculty of Bukhara State University. Using a mixed-methods approach with questionnaires, observations, and interviews, the research explores both the benefits and challenges of gamified learning, aiming to guide educators in leveraging technology to enhance teaching and learning. This study is directed through the subsequent research questions: 1. Do digital games increase students' motivation and engagement during the lessons? 2.Do digital games divert learners' attention from academic content and lead to impairment of critical thinking skills? 3.Are there any additional impediments to utilize digital games in EFL apart from the resolution about banning smartphone usage in the classrooms?

2 Literature Review

The practical implementation of digitalized games in English lessons where it is taught as a Foreign Language already become a popular pedagogical movement. This literature review observes digital gamification's impact on learner engagement, motivation, and cognitive development in EFL contexts.

Motivation in second language learning is increasingly understood as a socially situated and dynamic construct rather than a purely individual attribute. Darvin and Norton [3] argue that motivation is closely linked to learners' identities and access to power, noting that motivation alone does not lead to active engagement unless learners are able to invest in meaningful language practices, a distinction further clarified by Darvin and Norton [4]. In the Uzbek EFL context, learners' motivation is often shaped by limited opportunities for authentic English use beyond the classroom, as well as exam-oriented instruction, which may restrict learners' ability to transform motivation into sustained investment. Critical perspectives further suggest that dominant language ideologies can marginalize certain learner identities and reduce motivation [5].

Research on age and individual differences shows that motivational development varies across educational stages [6],[7], while literacy skills and affective factors also influence motivational outcomes [8]. Within this context, online tools offer valuable affordances by providing Uzbek EFL learners with access to authentic input, interaction, and identity expression, thereby supporting increased motivation and meaningful engagement with English learning [9].

Gamification has been widely conceptualized as the application of game-like elements - such as points, competition, levels, and visual rewards - to non-game educational tasks. Aziz [10] emphasizes that Quizizz is "one of the highly applied gamification tools in ESL assessment", noting its increasing prevalence in classrooms where teachers seek to modernize assessment practices. From a pedagogical perspective, digital tools support formative assessment by enabling teachers to conduct quick checks of understanding while also maintaining students' interest through game mechanics.Similarly, Sorohiti et al's [11] study demonstrates that gamified assessment fosters excitement and attentiveness among learners. Through observation and student feedback, the author reports that students exhibited greater enthusiasm during Quizizz tasks compared to traditional assessment methods. According to the research conducted by Foroutan et al [12], several students preferred to have games as a supplementary method to traditional ones. This aligns with broader literature [13], [14] on gamification, which suggests that interactive digital platforms sustain learner attention more effectively than conventional paper-based tasks because they mimic familiar recreational technologies. Studies converge on the point that digital simplifies complex assessment tasks without diminishing academic rigor. The game-based interface encourages participation from students who might otherwise feel intimidated by formal testing environments, thus promoting more inclusive assessment practices.

Most researches emphasize the role of online games in enhancing learner motivation and reducing negative affective factors such as anxiety or disengagement. Aziz [10] found across multiple reviewed studies that learners generally responded positively to the platform, with many appreciating the enjoyable atmosphere it created: "Teachers and students can benefit from its instant feedback and time flexibility". Instant feedback provides learners with a sense of progress and self-efficacy, two factors strongly linked to intrinsic motivation. Sorohiti et al's [11] findings echo this sentiment. Students frequently reported feeling "happy about their results in Quizizz games", an emotional response attributed in part to the platform's visual animations, celebratory sounds, and competitive scoring system. These features stimulate the reward centers of the brain, making learning feel more like play rather than work.

Importantly, many researchers highlight that motivation is not merely a superficial outcome of gamification; rather, it directly contributes to improved learning performance. Motivated learners are more likely to focus, persist through challenging tasks, and take ownership of their progress. Thus, the affective benefits of digital games play a crucial role in supporting deeper cognitive engagement with learning content. Competition is a double-edged component of gamification. While healthy competition can increase motivation and perseverance, excessive emphasis on winning may discourage lower-performing learners.

Taking into account the review studies mentioned above, it can be seen that these reviews included studies from various educational contexts without distinguishing

between them (for example, learning a second language or a foreign language, from primary to secondary education and higher education), covered many studies from different subject areas (for example, science, technology, health, and English), and focused on research investigating specific types of games, which leads to conflicting results. Consequently, understanding the benefits of using digital games for language learning in higher education remains challenging.

3 Methods and Research Design

This study employed a mixed-methods approach, integrating both quantitative and qualitative data to investigate the impact of digital gamification on students' motivation, engagement, and critical thinking abilities. The combination of approaches allowed for triangulation of data, enhancing the validity and reliability of the findings. The study involved 68 undergraduate students and 21 faculty members from the Foreign Languages Faculty of Bukhara State University. The students were aged 18–22 years, with a balance of gender representation (36 females, 32 males). Teachers ranged from 30 to 55 years old, with varying levels of experience in using digital technology in classrooms.

3.1 Instruments

a. Questionnaires: Separate Likert-scale questionnaires were administered to students and teachers to assess perceptions of digital gamification. Questions targeted motivation, engagement, and perceived effects on critical thinking.
b. Classroom Observations: Structured observation sheets recorded student behavior during digital game sessions. Indicators included participation level, collaboration, emotional engagement, and off-task behavior.
c. Interviews: Semi-structured interviews were conducted with teachers to explore their perspectives on the educational benefits and challenges of digital games.

The study was conducted over a 12-week semester. Three types of games-Quizizz, Kahoot, and Jeopardy-were integrated into different lessons. Each game was used at least twice per topic to ensure consistency. Observers recorded classroom behavior, and students completed questionnaires at the end of the semester. Teachers were interviewed during the last two weeks.

4 Results and Discussion

4.1 Results

Quantitative Findings. The data indicate that students perceive technology as a transformative tool for enhancing their English language skills, utilizing various applications, social media platforms, and collaborative tools. Many responses highlight the diverse ways in which structured digital technologies facilitate their learning, create

opportunities for practice, and help overcome emotional or psychological barriers that may impede their progress.

Analysis of student questionnaires revealed high levels of engagement and motivation when digital games were used. On a Likert scale (1 = strongly disagree, 5 = strongly agree), students rated their interests *(see Table 1)*. The findings from teacher questionnaires *(see Table 2)* suggest that game-based activities are perceived by teachers as highly effective in increasing student engagement and motivation, as reflected in the high mean scores. The relatively lower mean for critical thinking indicates that while teachers see some risk, they do not view games as fundamentally harmful when used appropriately. This concern likely reflects the need for careful instructional design to ensure that games support higher-order thinking rather than surface-level interaction.

Table 1. Student Responses on Engagement and Motivation

Variable	Mean (M)	Standard Deviation (SD)
Enhanced learner motivation	4.32	0.61
Student participation in the lesson	4.15	0.69
Collaborative engagement	4.48	0.55
Attention diversion and low critical thinking skills	2.11	0.87

Table 2. Teacher Perceptions of Digital Gamification

Variable	Mean (M)	SD
Digital games enhance engagement	4.10	0.67
Games improve student motivation	4.05	0.71
Risk of diminishing critical thinking	3.12	0.94
Challenges in digital access	3.48	0.88

Qualitative Findings. Observations revealed that students actively participated during digital game sessions. Collaborative gameplay encouraged peer discussion, problem-solving, and immediate feedback. Only a small number of students were observed engaging in off-task behavior. In majority classes this disruptive behaviour was due to the lack of clear instructions provided by the teacher. This aligns with what Metwally [15] states lack of guidance and distractions are additional challenges oftentimes reported by learners.Even though virtual games offer great chances to practice the language, it brings about the risks of overreliance and off-task behaviour. Teacher Interviews. Three main themes emerged from teacher interviews:

*Motivation and Engagement***.** Teachers noted that students showed enthusiasm and competitiveness, particularly in collaborative games.This findings can be seen in the following data based on informal interviews:

"*Interactivity is very important for me in the lesson. Language comes alive when students work in groups, using online digital games. This increases their motivation because they achieve visible results. I encourage them to share their achievements, because this gives them confidence in their own strength."*

„As a teacher, the most important task is for me to support students, build their confidence, and give them language skills that they can use in real life. I value the contribution each student makes to the lesson and committed to creating an environment where students feel safe, free, and valued. I will continue to base my pedagogical decisions on using digitalized tools."

„In short, my teaching philosophy is based on creating a supportive, motivating, and learner-centered environment. Online games like Quizziz or Kahoot bring motivation to all of of my students. I believe that if students are motivated and valued enough, they learn the language more easily and with more joy."

*Critical Thinking Concerns***.** A minority expressed that games emphasizing speed over depth could compromise higher-order thinking.

Digital Challenges. Teachers highlighted issues with Internet connectivity, lack of digital literacy among rural students, and the need for professional development.

4.2 Discussion

The results indicate that digital gamification positively affects student motivation and engagement, aligning with prior studies that highlight interactive learning as a driver of emotional and cognitive involvement. Students reported high enjoyment and collaboration, suggesting that game-based learning can foster a more participatory classroom environment.This results clearly align with other studies such as Sorohiti [11], Daulay et al's [16] and Niek Yai Wen and Abdul Aziz [10], whose valuable researches also discovered positive attitudes among different level university students towards digital tools, namely, Quizziz.

While teachers acknowledged these benefits, they also raised concerns about critical thinking, which aligns with studies cautioning that overly competitive or speed-based games may prioritize superficial performance over deep learning. Nevertheless,

observation data indicated that most students were actively engaged in problem-solving, suggesting that the perceived risk in game-based learning contexts of the field of EFL may be relativlely overestimated.

Regarding the resuls given in the table above: in *students'* responses the mean score was 4.32 with a standard deviation of 0.61. This indicates that students felt highly motivated when games were used in lessons. Emotional engagement had a mean of 4.15 and SD of 0.69, showing that students were not only participating but were emotionally involved and enjoying the process. Collaborative play scored the highest, with a mean of 4.48 and SD of 0.55. This suggests that group games strongly encouraged teamwork and interaction among students. Finally, distraction was low, with a mean of 2.11 and SD of 0.87. This is reassuring because it shows that digital games did not significantly distract students from learning core content. *Teachers* agreed that games enhance student engagement, with a mean of 4.10 and SD of 0.67. They also reported improved student motivation, with a mean of 4.05 and SD of 0.71. Regarding critical thinking, there was a moderate concern. The mean score was 3.12 and SD 0.94, indicating a slight risk if games are used incorrectly, but it is not very high. Challenges related to access, such as internet connectivity and digital literacy, were rated 3.48 with SD 0.88. In summary, teachers noticed strong engagement and motivation, minor concerns about critical thinking, and moderate challenges with access and digital competence. These results align closely with students' own experiences.

Conclusion

This article addresses certain issues related to motivation, engagement, and informal learning in connection with playing digital games. It is evident that the relationship among these concepts is insufficiently studied, and further empirical research is needed to assess how they are interconnected. Research is also required that considers not only individuals playing games but also their participation in broader sociocultural activities.

If teachers want to try to replicate people's enthusiasm for games in a formal educational context, they first need to understand how this enthusiasm arises in everyday gaming practice. This will not only help better understand how to create more engaging commercial games, but it will also impact the development of educational games. By examining how this process varies among different people, we can also consider the implications for how educational games should be designed and used in different contexts.

In conclusion, our study shows that digital gamification significantly enhances students' motivation, engagement, and collaborative learning in language lessons. The perceived risk to critical thinking is minimal, especially when games are structured to encourage problem-solving rather than just speed. Nevertheless, practical challenges remain, including internet access, students' digital literacy—particularly in rural areas—and the need for teacher professional development. We recommend that schools provide ongoing training for teachers and focus on collaborative gaming activities to maximize educational benefits. Overall, when used thoughtfully, digital games can transform lessons into an interactive and highly engaging educational experience.

Suggestion. This study still has some limitations. It used a fairly homogeneous sample and a questionnaire with certain restrictions. The study didn't consider potential confounding variables, like students' previous experience with game-based learning tools, their engagement outside of class, or teacher involvement, which could all affect learning outcomes. For future research looking at digital game-based learning in the context of learning English as a foreign language, researchers should broaden the diversity of participants in terms of number, academic background, and language proficiency to better assess the effectiveness of digital games across larger groups and make the results more generalizable.

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