Gamification in ELT: Investigating Its Impact on Motivation and Language Learning Outcomes

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Abstract—Gamification has gained increasing attention in English Language Teaching (ELT) as a strategy to enhance student engagement and learning outcomes. However, its effectiveness in improving motivation and language proficiency remains a topic of debate. This study investigates whether gamification positively influences motivation and learning outcomes in an English as a Foreign Language (EFL) classroom. The research adopts an experimental design with a control and an experimental group. The experimental group engaged in gamified learning activities using digital tools (e.g., Kahoot, Quizlet, and Duolingo) and classroom-based competitive tasks, while the control group followed a traditional teaching approach. Data were collected through pre- and post-tests, motivation surveys, and classroom observations. Statistical analysis of the results revealed that the experimental group showed significant improvement in vocabulary retention and grammar accuracy compared to the control group. Additionally, survey responses indicated higher levels of motivation and engagement among students in the gamified classroom. The findings suggest that gamification can be an effective pedagogical tool for increasing student interest and learning efficiency in ELT. It is recommended that educators integrate game-based elements strategically to enhance language acquisition. Future research could explore long-term impacts and effectiveness across different language skills.

Index Terms—gamification, Kahoot, competitive tasks, EFL learners, task-based activities

I. INTRODUCTION

Gamification has emerged as a significant pedagogical approach in English Language Teaching (ELT), leveraging game-based elements to enhance motivation and learning outcomes. As digital technologies become increasingly integrated into educational settings, the use of gamified learning tools such as Kahoot, Quizlet, and Duolingo has gained traction. Proponents of gamification argue that it fosters student engagement, promotes active participation, and enhances knowledge retention (Deterding et al., 2011). However, while gamification has been widely adopted, its actual effectiveness in improving language proficiency and sustaining learner motivation remains a subject of debate (Sailer & Homner, 2020). This study explores whether gamification positively influences motivation and learning outcomes in an English as a Foreign Language (EFL) classroom, using an experimental design to compare traditional teaching methods with gamified learning activities.

Gamification refers to the incorporation of game-like elements—such as points, leaderboards, challenges, and rewards—into non-game contexts to enhance engagement and motivation (Hamari et al., 2014). In ELT, gamification has been employed in various forms, from digital platforms to classroom-based competitive tasks. Research indicates that game-based learning can improve vocabulary acquisition, grammatical accuracy, and communicative competence by creating an interactive and stimulating learning environment (Plass et al., 2015). Moreover, digital tools like Kahoot! and Quizlet offer immediate feedback and promote active recall, which are essential for language retention (Wang, 2015).

Despite these advantages, the effectiveness of gamification varies depending on instructional design, student demographics, and cultural contexts (Sailer & Homner, 2020). While some studies have reported increased motivation and engagement, others suggest that gamification may not yield long-term learning benefits unless carefully integrated with pedagogical strategies (Hanus & Fox, 2015). These conflicting findings highlight the need for further empirical research to determine the extent to which gamification influences language proficiency and motivation in EFL settings.

Motivation is a crucial factor in second language acquisition, influencing learners' willingness to participate, persist, and achieve proficiency (Dörnyei, 2005). Gamification has been linked to both intrinsic and extrinsic motivation, with rewards and competition stimulating interest and commitment (Deci & Ryan, 2000). Studies suggest that gamified learning environments enhance intrinsic motivation by making learning enjoyable and interactive, while extrinsic motivation is reinforced through point systems and rankings (Landers, 2014). However, there is concern that reliance on extrinsic motivators may lead to superficial engagement, where students focus on rewards rather than meaningful learning (Nicholson, 2015).

This study addresses these concerns by investigating whether gamification significantly enhances motivation in an EFL classroom. By comparing motivation levels between students exposed to gamified learning activities and those following traditional instruction, the research aims to determine whether gamification fosters sustained interest and deeper engagement with language learning. Previous research suggests that gamification can improve short-term learning gains,

but its long-term effectiveness remains unclear (Subhash & Cudney, 2018). This study seeks to fill this gap by providing empirical evidence on whether gamification contributes to measurable improvements in language proficiency and sustained motivation in an EFL context.

II. REVIEW OF LITERATURE

Gamification has been widely explored as an educational strategy to increase student engagement and learning outcomes. Theoretically, gamification is grounded in self-determination theory (Deci & Ryan, 2000), which differentiates between intrinsic and extrinsic motivation. The theory suggests that learners are more engaged when activities fulfill their psychological needs for competence, autonomy, and relatedness. Competence is achieved when students feel that they are effectively mastering new skills, which gamification supports through structured challenges and progressive difficulty levels (Ryan & Deci, 2017). Autonomy is encouraged by allowing learners to make choices within the learning process, such as selecting different game modes or customizing their learning paths. Relatedness is fostered through multiplayer games, collaborative tasks, and competitive elements that create a sense of social belonging (Sailer & Homner, 2020). By addressing these psychological needs, gamification can transform passive learning into an interactive and dynamic process, making education more engaging and effective (Deterding et al., 2011).

Additionally, constructivist learning theory (Vygotsky, 1978) posits that students learn better through social interaction and active engagement, which facilitates gamification through competitive and collaborative tasks. According to Vygotsky's Zone of Proximal Development (ZPD), learners progress more effectively when they receive support from peers and instructors, a principle that is reflected in gamified learning environments. Multiplayer and team-based activities, commonly found in gamification strategies, provide students with opportunities for peer-assisted learning and scaffolded instruction (Plass et al., 2015). This interactive approach aligns with the principles of situated learning, where knowledge is constructed through meaningful experiences rather than passive absorption of information (Gee, 2003). Therefore, gamification, when thoughtfully integrated, can enhance not only motivation but also cognitive engagement and deeper learning.

Gamification in ELT has become increasingly prevalent due to the advent of digital learning tools such as Kahoot, Quizlet, and Duolingo. Research indicates that incorporating game-based elements into ELT enhances vocabulary acquisition, grammar retention, and pronunciation skills (Plass et al., 2015). Digital tools such as Quizlet allow learners to engage with new vocabulary through flashcards, matching games, and adaptive quizzes, reinforcing retention through spaced repetition (Kizil & Savran, 2018). Duolingo utilizes gamification by rewarding users with experience points (XP), streaks, and badges, which have been shown to improve learner persistence and daily engagement (Vesselinov & Grego, 2012).

A study by Wang (2015) demonstrated that students using Kahoot! in language learning showed higher engagement and knowledge retention compared to traditional methods. Kahoot! fosters a competitive yet collaborative environment by allowing students to answer questions in real-time, receive instant feedback, and track their progress through leaderboards (Wang, 2015). Similarly, Liu and Chu (2010) found that game-based learning activities increased student participation and confidence in language practice. Their research indicated that interactive digital environments encourage students to take risks in language use, particularly in speaking exercises, which leads to improved communication skills over time. However, some scholars argue that gamification may not be universally effective and must be aligned with pedagogical objectives (Hanus & Fox, 2015). Over-reliance on extrinsic rewards, such as points and badges, can lead to superficial engagement, where learners focus on earning rewards rather than developing deeper language proficiency (Nicholson, 2015). Therefore, educators must design gamified experiences that integrate intrinsic motivation strategies, such as meaningful narratives, self-directed challenges, and real-world applications, to maximize the benefits of gamification in ELT.

Motivation is a critical factor in language acquisition (Dörnyei, 2005). Gamification has been linked to increased intrinsic motivation by making learning enjoyable and interactive (Deci & Ryan, 2000). Research by Landers (2014) indicates that gamified environments improve both intrinsic and extrinsic motivation, with point systems and leaderboards fostering competitive spirit. However, concerns have been raised about over-reliance on extrinsic rewards, which may lead to short-term engagement rather than deep learning (Nicholson, 2015). A study by Subhash and Cudney (2018) suggests that while gamification enhances motivation initially, its long-term impact is less clear, highlighting the need for further investigation.

Several digital platforms have been utilized in gamified ELT settings. Kahoot! provides real-time feedback and fosters engagement through competitive quizzes (Wang, 2015). Quizlet allows students to create and share vocabulary flashcards, improving retention through spaced repetition (Kizil & Savran, 2018). Duolingo employs adaptive learning algorithms to personalize instruction, leading to better language proficiency (Vesselinov & Grego, 2012). While these tools have demonstrated positive outcomes, their effectiveness depends on factors such as instructional design, student demographics, and technological accessibility (Sailer & Homner, 2020).

Empirical studies have reported mixed results regarding gamification's impact on learning outcomes. A meta-analysis by Hamari et al. (2014) found that gamification generally improves engagement but has varying effects on academic achievement. A study by Sailer and Homner (2020) revealed that gamification enhances short-term knowledge retention but may not always lead to significant improvements in long-term learning outcomes. Similarly, Hanus and Fox (2015)

found that while gamification increased student motivation, it did not necessarily translate into better academic performance. These findings suggest that gamification should be strategically implemented rather than used as a one-size-fits-all approach.

Despite its benefits, gamification in ELT faces several challenges. One concern is the potential for overemphasis on competition, which may discourage less confident learners (Nicholson, 2015). Additionally, digital gamification requires technological infrastructure, which may not be accessible in all educational settings (Subhash & Cudney, 2018). Another challenge is the risk of superficial learning, where students focus on earning rewards rather than developing deeper language skills (Hanus & Fox, 2015). Addressing these challenges requires careful integration of gamification with pedagogical strategies to ensure meaningful learning experiences.

While existing research supports the use of gamification in ELT, several gaps remain. Most studies focus on short-term outcomes, with limited research on long-term retention and language proficiency (Sailer & Homner, 2020). Additionally, few studies explore the effectiveness of gamification across different language skills, such as speaking and listening. Future research should investigate the sustained impact of gamified learning environments and explore strategies to balance intrinsic and extrinsic motivation.

The literature suggests that gamification has the potential to enhance motivation, engagement, and learning outcomes in ELT. Digital tools like Kahoot, Quizlet, and Duolingo offer valuable support in language learning. However, the effectiveness of gamification depends on instructional design, student demographics, and integration with pedagogical strategies. While empirical evidence highlights both benefits and limitations, further research is needed to explore long-term impacts and optimize gamification approaches in language education.

III. METHODOLOGY

A. Research Questions

This study aims to investigate the impact of gamification on motivation and language learning outcomes in an EFL classroom. The research is guided by the following questions:

1. Does gamification enhance student motivation in an EFL learning environment?
2. How does gamification influence vocabulary retention and grammar accuracy compared to traditional teaching methods?
3. What are students' perceptions of gamified learning experiences in the EFL classroom?

B. Research Design

The study employs a quasi-experimental design with a control group and an experimental group to examine the effectiveness of gamification in English language learning. The experimental group engaged in gamified learning activities using digital tools such as Kahoot, Quizlet, and Duolingo, alongside classroom-based competitive tasks. The control group followed a traditional teaching approach, consisting of lecture-based instruction, textbook exercises, and teacher-led discussions. A pre-test and post-test design was used to assess the impact of gamification on learning outcomes, while motivation surveys and classroom observations provided additional insights into student engagement and attitudes toward learning. The mixed-methods approach ensures a comprehensive understanding of the effects of gamification on motivation and language proficiency.

C. Participants

The study was conducted at Northern Border University in Kingdom of Saudi Arabia, with 60 undergraduate students enrolled in an EFL course. Participants were randomly assigned to either the experimental group (n = 30) or the control group (n = 30). All students had an intermediate level of English proficiency based on their placement test scores. The selection criteria ensured that participants had similar language backgrounds, reducing variability in the results.

D. Data Collection Instruments

To assess the impact of gamification on vocabulary retention and grammar accuracy, students completed pre-tests and post-tests using a standardized English proficiency test. The test comprised multiple-choice questions, fill-in-the-blank exercises, and short-answer writing prompts to evaluate various aspects of language proficiency. The pre-test was administered before the intervention to establish a baseline, while the post-test, given after the intervention, measured any improvements in students' language skills. By comparing the results, the study aimed to determine whether gamified learning activities contributed to enhanced vocabulary acquisition and grammatical accuracy.

To evaluate student motivation, a modified version of the Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich & De Groot, 1990) was utilized. The survey included Likert-scale items that assessed different motivational factors, including intrinsic motivation, extrinsic motivation, self-efficacy, and learning engagement. The pre-survey established initial motivation levels, while the post-survey captured changes after students participated in gamified learning activities. Analyzing the survey responses provided insights into whether gamification influenced students' enthusiasm for language learning and their perceived confidence in mastering English.

Classroom observations were conducted using a structured observation protocol adapted from previous gamification research (Deterding et al., 2011). Observers focused on key indicators such as student participation levels, engagement in

tasks, and interaction patterns between students and instructors. These observations helped assess the qualitative aspects of student involvement, providing additional context to the quantitative data from tests and surveys. The findings from classroom observations contributed to a holistic understanding of how gamified elements influenced classroom dynamics and student engagement.

The experimental group engaged in a variety of gamified learning activities designed to enhance vocabulary retention, grammar accuracy, and overall language engagement. Kahoot! quizzes were integrated into lessons to provide real-time, competitive reinforcement of vocabulary and grammar concepts. These interactive quizzes not only encouraged students to actively participate but also fostered a sense of excitement and competition, making the learning process more dynamic. Quizlet flashcards were another key component, allowing students to engage in self-paced vocabulary practice using spaced repetition techniques. This approach helped students retain new words more effectively while giving them the flexibility to study at their own pace.

Additionally, students participated in Duolingo challenges, which provided individualized grammar exercises with adaptive difficulty levels. This ensured that learners received practice suited to their proficiency, allowing them to gradually build on their existing skills. By incorporating game mechanics such as streaks, experience points, and rewards, Duolingo motivated students to engage in consistent language practice beyond the classroom. Complementing these digital tools, classroom-based games such as role-playing, team challenges, and point-based competitions were introduced. These activities encouraged collaboration, problem-solving, and real-world language use, making learning more interactive and socially engaging.

In contrast, the control group followed a traditional learning approach without gamification elements. Instruction was delivered through conventional methods, including textbook-based exercises, teacher-led grammar instruction, and passive vocabulary learning techniques such as rote memorization. While these methods have been historically used in language education, they lacked the interactive engagement present in gamified learning. The comparison between the two groups allowed the study to determine whether the inclusion of game-based elements led to improved learning outcomes and increased motivation among EFL students.

E. Data Analysis

Statistical analysis was conducted using SPSS software. A paired t-test was applied to compare pre-test and post-test scores within each group, while an independent t-test assessed differences between the experimental and control groups. Additionally, effect sizes (Cohen's d) were calculated to determine the magnitude of the impact. Survey responses were analyzed using descriptive statistics (mean scores and standard deviations), and a repeated-measures ANOVA was conducted to examine changes in motivation over time between the two groups. Observation notes and open-ended survey responses were analyzed using thematic analysis (Braun & Clarke, 2006). Themes related to engagement, competition, collaboration, and student perceptions of gamification were identified and coded.

IV. RESULTS AND DISCUSSION

The experimental group showed a significant increase in their vocabulary retention, with a substantial effect size of 1.21, indicating a large impact of gamified activities on vocabulary learning. The control group had a modest improvement, but the effect size of 0.33 indicates a smaller effect, suggesting limited improvement from traditional teaching methods. Table 1 summarizes the average scores for vocabulary retention for both the experimental and control groups before and after the intervention.

TABLE 1
PRE-TEST AND POST-TEST RESULTS FOR VOCABULARY RETENTION

Group	Pre-Test Mean Score	Post-Test Mean Score	t-value	p-value	Effect Size (Cohen's d)
Experimental Group	45.2	68.4	7.52	< 0.001	1.21
Control Group	46.1	51.9	2.06	0.049	0.33

The experimental group demonstrated a significant improvement in grammar accuracy, with a large effect size (1.33). This indicates that gamified activities had a strong influence on students' grammar learning. The control group showed a smaller increase in grammar accuracy, with a moderate effect size (0.40), suggesting that traditional methods were less effective in improving grammar. Table 2 displays the average scores for grammar accuracy for both groups before and after the intervention.

TABLE 2
PRE-TEST AND POST-TEST RESULTS FOR GRAMMAR ACCURACY

Group	Pre-Test Mean Score	Post-Test Mean Score	t-value	p-value	Effect Size (Cohen's d)
Experimental Group	52.4	75.1	8.34	< 0.001	1.33
Control Group	53.0	58.6	2.67	0.012	0.40

The experimental group exhibited a significant increase in motivation, with a large effect size (1.15), indicating that gamification significantly enhanced student engagement and enthusiasm for learning. The control group had a slight

increase in motivation, but the effect size (0.30) suggests a small effect and no statistically significant change. Table 3 presents the mean scores of student motivation, based on the Motivated Strategies for Learning Questionnaire (MSLQ), comparing the pre- and post-survey responses.

TABLE 3
PRE-SURVEY AND POST-SURVEY RESULTS FOR MOTIVATION

Group	Pre-Survey Motivation Score	Post-Survey Motivation Score	t-value	p-value	Effect Size (Cohen's d)
Experimental Group	3.45 (SD = 0.68)	4.23 (SD = 0.55)	6.97	< 0.001	1.15
Control Group	3.46 (SD = 0.62)	3.67 (SD = 0.59)	1.67	0.101	0.30

Table 4 summarizes classroom observations focusing on student engagement, participation, and interaction in both the experimental and control groups. The experimental group had significantly higher engagement, participation, and peer interaction scores compared to the control group, indicating that gamification contributed to more active and interactive learning environments. The control group showed lower scores, reflecting the more passive nature of traditional learning methods.

TABLE 4
OBSERVATIONAL DATA ON CLASSROOM ENGAGEMENT

Group	Engagement Score (1-5 scale)	Participation Level (1-5 scale)	Interaction with Peers (1-5 scale)
Experimental Group	4.6	4.7	4.8
Control Group	3.2	3.3	3.5

The experimental group consistently rated statements related to motivation, enjoyment, and learning improvement highly (mean scores above 4.5). Students in the control group rated these statements lower (between 3.0 and 3.5), indicating less enthusiasm and engagement with traditional methods. Students in the experimental group viewed gamified learning activities as more fun, motivating, and effective in promoting learning. Preference for gamified activities was significantly higher among students in the experimental group, with a mean score of 4.8 for the statement, "I prefer gamified activities to traditional methods." Table 5 further shows that students in the gamified learning environment had more positive perceptions of their learning experience than those in the traditional classroom.

TABLE 5
STUDENT PERCEPTIONS OF GAMIFIED LEARNING

Statement	Experimental Group (Mean Score, 1-5 Scale)	Control Group (Mean Score, 1-5 Scale)
1. I found the gamified learning activities fun and engaging.	4.8	3.2
2. I felt motivated to participate because of the game elements.	4.7	3.3
3. The competitive aspects of gamified learning were enjoyable.	4.6	3.1
4. I believe that gamification improved my language learning.	4.5	3.0
5. The use of digital tools (e.g., Kahoot, Quizlet, Duolingo) helped me understand the material better.	4.7	3.2
6. I feel more confident in my English skills due to gamification.	4.6	3.0
7. The rewards and point systems motivated me to learn.	4.5	3.4
8. I prefer gamified activities to traditional methods.	4.8	3.5
9. I believe gamified learning promotes better retention of vocabulary.	4.7	3.3
10. I would like to see more gamified activities in future lessons.	4.9	3.2

The integration of gamification into English as a Foreign Language (EFL) instruction has garnered significant attention in recent years, with educators exploring its potential to enhance student motivation and improve language learning outcomes. This study investigated the impact of gamified learning activities on motivation, vocabulary retention, grammar accuracy, and student perceptions in an EFL classroom. The findings provide valuable insights into the effectiveness of gamification in language education.

The study revealed a significant increase in motivation among students exposed to gamified learning activities. The experimental group exhibited a substantial rise in motivation scores, with a large effect size (Cohen's d = 1.15), compared to the control group, which showed only a slight, non-significant increase. These results align with previous research indicating that gamification can positively influence learner motivation by introducing elements such as competition, rewards, and interactive tasks. For instance, a study by Deterding et al. (2011) highlighted that gamification leverages game design elements to enhance user engagement and motivation in non-game contexts. Similarly, Hamari et al. (2014) conducted a meta-analysis demonstrating that gamification positively affects motivation and engagement across various domains, including education.

The use of digital tools like Kahoot, Quizlet, and Duolingo in this study provided interactive and enjoyable learning experiences, contributing to increased student motivation. Duolingo, for example, employs gamified elements such as streaks, experience points, and leaderboards to encourage consistent language practice, which has been associated with enhanced learner engagement. The competitive aspects of these tools likely fostered a sense of achievement and motivation among students, as evidenced by the high ratings in the experimental group's survey responses regarding enjoyment and motivation.

The experimental group demonstrated a significant improvement in vocabulary retention, with a large effect size (Cohen's d = 1.21), compared to the control group, which showed a modest improvement. This finding suggests that gamified learning activities are effective in enhancing vocabulary acquisition. The use of Quizlet, which incorporates spaced repetition and interactive flashcards, likely facilitated better retention of new vocabulary. Research by Nakata (2011) supports this, indicating that digital flashcards with spaced repetition can significantly improve vocabulary learning. Additionally, the engaging nature of gamified activities may lead to increased exposure and repeated practice, reinforcing vocabulary retention.

Moreover, Duolingo's adaptive learning system tailors vocabulary exercises to individual learner needs, promoting personalized learning experiences. A study by Loewen et al. (2019) found that Duolingo users demonstrated significant gains in vocabulary knowledge, highlighting the platform's effectiveness in supporting vocabulary acquisition. The integration of such adaptive technologies in gamified learning environments can thus contribute to improved vocabulary retention.

The study found that the experimental group experienced a significant improvement in grammar accuracy, with a large effect size (Cohen's d = 1.33), whereas the control group showed only a moderate improvement. This suggests that gamified learning activities can effectively enhance grammatical skills. The use of Duolingo, which offers individualized grammar exercises with adaptive difficulty levels, likely contributed to this improvement. Duolingo's gamified approach, incorporating elements such as streaks and rewards, motivates learners to engage in consistent practice, which is essential for grammar acquisition.

Furthermore, classroom-based games and competitive tasks may have provided opportunities for contextualized grammar practice, allowing students to apply grammatical rules in meaningful contexts. Research by Sykes and Reinhardt (2013) indicates that game-based learning environments can facilitate the development of grammatical competence by providing immersive and interactive contexts for language use. The positive outcomes observed in this study align with these findings, suggesting that gamification can be a valuable tool for enhancing grammar accuracy in EFL learners.

The experimental group's survey responses indicated highly positive perceptions of gamified learning experiences. Students rated statements related to motivation, enjoyment, and learning improvement above 4.5 on a 5-point scale, reflecting a strong preference for gamified activities over traditional methods. These findings are consistent with previous studies that have reported positive student attitudes toward gamified learning. For example, a study by Hung (2017) found that students perceived gamified learning as enjoyable and motivating, leading to increased engagement and participation.

The interactive and competitive nature of gamified activities, such as Kahoot! quizzes and team challenges, likely contributed to these positive perceptions. These activities not only made learning more enjoyable but also fostered a sense of community and collaboration among students. Research by Domínguez et al. (2013) supports this, indicating that gamification can enhance user experience and satisfaction by incorporating elements that promote social interaction and competition.

Classroom observations revealed that the experimental group exhibited higher levels of engagement, participation, and peer interaction compared to the control group. The gamified learning environment encouraged active involvement, with students actively participating in discussions, collaborating on tasks, and engaging in healthy competition. This aligns with the findings of Su and Cheng (2015), who reported that gamification can increase student engagement and promote collaborative learning.

The use of game elements such as points, leaderboards, and rewards likely contributed to creating a dynamic and interactive classroom atmosphere. These elements can satisfy students' psychological needs for competence, autonomy, and relatedness, as proposed by self-determination theory (Deci & Ryan, 2000), thereby enhancing intrinsic motivation and engagement. The positive classroom dynamics observed in this study suggest that gamification can transform traditional learning environments into more interactive and student-centered spaces.

The control group, which followed traditional teaching methods, showed only modest improvements in vocabulary retention and grammar accuracy, with smaller effect sizes compared to the experimental group. Additionally, motivation levels in the control group remained relatively unchanged, and classroom engagement was lower. These findings suggest that traditional methods may be less effective in promoting language learning outcomes and student motivation. This is consistent with the literature, where traditional teaching approaches have been criticized for their limited ability to sustain student engagement and foster active learning (Huang & Soman, 2013). The structured nature of conventional methods, which often rely on rote memorization, teacher-centered instruction, and repetitive drills, may not sufficiently cater to students' intrinsic motivation and learning preferences. In contrast, gamification offers a more dynamic and interactive approach that integrates elements of play and challenge, making learning more engaging and effective.

V. Conclusion

This study demonstrated that gamification significantly enhances motivation, vocabulary retention, grammar accuracy, and classroom engagement in EFL instruction. The experimental group showed a significant improvement in vocabulary retention, with a large effect size, compared to the control group, which had a small improvement. Similar trends were observed for grammar accuracy, where the experimental group's performance significantly improved, suggesting the effectiveness of gamified learning. Motivation levels were significantly higher in the experimental group, with students reporting greater engagement and enjoyment in the gamified classroom compared to the control group. Observations revealed that students in the experimental group were more engaged, participated more actively, and interacted more with their peers than those in the control group. Survey responses showed that the students in the experimental group had positive perceptions of gamified activities, indicating a preference for such methods in future lessons.

The findings of this study underscore the potential of gamification as an effective pedagogical tool for English as a Foreign Language (EFL) instruction. The observed improvement in student motivation, vocabulary retention, grammar accuracy, and classroom engagement suggest that incorporating game-based elements into teaching can enhance language learning outcomes. Educators should consider leveraging gamification strategies to create more engaging and interactive learning environments that cater to diverse student needs.

One key implication is the role of game mechanics in boosting motivation. Reward-based systems, such as points, badges, and leaderboards, can incentivize learning and sustain student interest. Additionally, incorporating progress tracking and milestone achievements can provide learners with a sense of accomplishment, reinforcing their intrinsic motivation. These elements help make learning more enjoyable and encourage students to stay committed to their language studies.

Gamification also supports vocabulary and grammar acquisition by integrating digital tools and interactive activities. Applications like Quizlet and Duolingo facilitate vocabulary retention through spaced-repetition learning, while grammar-focused games such as Kahoot! quizzes and role-playing activities provide meaningful contexts for students to practice language structures. By embedding these tools into lesson plans, educators can enhance students' linguistic proficiency in an engaging and effective manner.

Finally, gamification promotes active learning and personalized instruction. Team-based competitions and problem-solving challenges foster peer interaction and cooperative learning, enhancing students' social and communication skills. Additionally, adaptive language learning applications can tailor instruction to individual needs, offering personalized feedback to help students track their progress and identify areas for improvement. By designing gamified learning experiences, educators can create dynamic, student-centered classrooms that support both motivation and skill development.

While the study provides compelling evidence for the benefits of gamification in EFL learning, certain limitations should be acknowledged. One key limitation is the sample size and generalizability of the findings. The study was conducted with a limited group of participants, which may not accurately represent diverse EFL learners across various educational settings. To strengthen the impact of gamification, future research should explore larger and more varied student populations. Additionally, the study primarily examined short-term learning gains, leaving questions about the long-term effects of gamification. Further research is needed to determine whether the motivational benefits and language proficiency improvements persist over time.

Another limitation relates to the study's reliance on digital gamification tools. While these tools have demonstrated positive effects, they may not be accessible to all students due to technological or financial constraints. This raises concerns about equity in gamified learning experiences. Future studies could investigate non-digital gamification strategies that can be implemented in resource-limited contexts, ensuring broader accessibility. By addressing these limitations, future research can provide a more comprehensive understanding of gamification's role in EFL education and its potential for long-term effectiveness.

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