



The Effect of Gamified Instruction on EFL Student's Motivation and Participation: A Quantitative Study of 8th Grade Students in Palestine

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DOI:10.5281/zenodo.21111695

ARTICLE INFO

Article history:

Received : 25-04-2026

Accepted : 28-05-2026

Available online : 30-06-2026

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Citation: Bharat, T. R. K., Tashtoosh, S., Hetti, A., Alawneh, A., Natour, S., Dweikat, D., & Alhaj Ahmad, A. (2026). The Effect of Gamified Instruction on EFL Student's Motivation and Participation: A Quantitative Study of 8th grade Students in Palestine. *IKR Journal of Education and Literature (IKRJEL)*, 2(3), 1-11.



ABSTRACT

Original Research Article

This study examines how gamified instruction affects EFL students' motivation and engagement in English classrooms. The study attempts to determine whether the use of gamified activities and digital tools can enhance students' engagement and promote active involvement in English learning. It addresses low motivation and limited classroom participation among eighth-grade students at Elaf Scientific Schools in Jenin. With a sample of twenty-five eighth-graders, the study used a quantitative one-group pretest-posttest approach. A motivation questionnaire and a participant observation checklist were used to collect data before and after the instructional intervention. In addition to activities based on points, awards, challenges, and instant feedback, gamified instruction was incorporated in English classes using digital platforms such as Wordwall and Kahoot. The results showed that following the intervention, pupils' motivation and participation significantly improved. During class activities, students showed increased levels of engagement, confidence, and excitement. According to the study's findings, gamified instruction can improve English language acquisition in Palestinian EFL classrooms by fostering a more dynamic and student-centered learning environment.

Keywords: Gamified Instruction, EFL Learners, Motivation, Participation, Wordwall, Kahoot.

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Introduction

Background of the Study

English has become a universal language essential for communication across a variety of professional and academic settings. Because of this, studying English as a foreign language (EFL) has become increasingly important worldwide. However, many students find it difficult to develop the language skills necessary to grasp English, such

as speaking, listening, reading, and writing. One of the most crucial factors affecting EFL learners' performance is motivation (Can & Tezcan, 2015).

Motivation is a significant factor in the learning process, shaping students' focus, effort, and independence. Albrecht and Karabenick (2017) have defined it as the psychological mechanisms that drive, direct, and maintain people's behavior toward achieving specific goals.

Gamified instruction is one of the most innovative approaches in EFL education (Johnston et al., 2024), as it incorporates game elements such as points, awards, and challenges into learning activities. This approach is intended to increase students' participation and motivation in the learning process. This approach not only makes language learning more enjoyable but also encourages students to set personal objectives, track their progress, and practice independently outside of the classroom (Zainuddin, 2018).

Recent advances in educational technology have led to the development of gamified digital platforms that facilitate interactive language learning. Tools such as Kahoot and Wordwall use game-based aspects, including quizzes, challenges, rapid feedback, and prizes to enhance students' independence, engagement, and participation in EFL classrooms. By combining entertaining and educational objectives, such techniques help stimulate students' interest and engagement in EFL classes. (Li et al., 2024) The gamified tool that stands out amongst others is called Wordwall. Considering the benefits of Wordwall, a versatile platform, teachers can create engaging activities aligned with specific language-learning objectives, such as word games, matching activities, and quizzes. Due to this gamified tool's flexibility, teachers can adapt the content to specific learning approaches and proficiency levels. Furthermore, Kahoot's ability to provide instant feedback makes it easy for learners to recognize their mistakes and improve their performance, thereby increasing their motivation and involvement in classroom activities (Jannah & Syafryadin, 2022).

Kahoot is one of the best-known game-based learning tools that turn ordinary class activities into highly interactive, competitive experiences. It enables teachers to create live quizzes that students can answer in real time using digital devices. Points, leaderboards, and timed responses are examples of competitive aspects that create a motivating learning environment and encourage students to participate more actively. Additionally, Kahoot encourages participation by creating a low-stress environment where students feel more at ease responding to questions, thereby boosting their confidence in EFL classes (Jannah & Syafryadin, 2022).

Gamified instruction appears to be an emerging pedagogical tool amid growing demand for innovative and efficient instructional approaches, particularly in contexts where traditional methods may be insufficient. This method enables addressing some of the persistent challenges in language learning environments by fostering motivation and active participation. Its emphasis on interactive, student-centered learning is consistent with the needs of educational environments where external constraints may limit students' opportunities for meaningful practice. As a result, investigating the use of gamified instruction becomes especially important in situations characterized by limited resources and low student motivation (Xiaofan & Annamalai, 2025).

Palestinian students face significant challenges in accessing quality English education due to political, economic, and cultural factors. Under these conditions, the classroom becomes a key environment for developing their English language skills (Rafidi & Wagner, 2023).

Therefore, the current thesis seeks to investigate the impact of gamified instruction on EFL students' motivation and participation in English classes for eighth grade at Elaf Scientific Schools in Jenin. It seeks to examine how gamified instructional technologies can be integrated into classroom procedures and their impact on student motivation and participation.

Problem statement

Despite the growing recognition of the importance of motivation and active participation in English as a Foreign Language (EFL) learning, many 8th-grade students at Elaf scientific schools in Jenin still face obstacles to engagement and continue to demonstrate low levels of participation in English classrooms, as was noticed through observation and informal discussions with English teachers. Traditional teaching techniques, which often count on teacher-centered instruction, don't adequately motivate learners or encourage active involvement in the educational process.

Even though gamification has been regarded as an innovative strategy that incorporates game components into learning activities to improve learners' engagement, this instructional strategy hasn't yet been widely adopted in Palestinian English as a Foreign Language (EFL) settings. Also, most gamified applications aren't free; therefore, Palestinian schools are unable to fully implement them. If they are activated, they are used in their simple free versions.

Given the limitations in teaching Palestinians, including the scarcity of materials and limited access to English-speaking environments, it is necessary to explore alternative ways to improve the learning process. This study attempts to address participants' motivation through gamified instructions among 8th-grade students at the mentioned school.

Study Questions

The study seeks to answer the following questions:

1. What is The Effect of Gamified Instruction on eighth-grade EFL Students' Motivation in English Classes as measured by pre- and post-intervention scores?
2. What is The Effect of Gamified Instruction on eighth-grade EFL Students' Participation in English Classes as measured by pre- and post-intervention scores?

Study hypotheses

The current study seeks to address the following hypotheses:

1. There is no statistically significant difference at ($\alpha = 0.05$) in students' motivation between the pre- and post -test mean scores of students' motivation after the implementation of gamified instruction.

2. There is no statistically significant difference at ($\alpha = 0.05$) in students' participation before and after gamified instruction.

Study objectives

This current study aims to achieve the following objectives:

1. To explore the extent to which gamified instruction boosts EFL students' motivation, which includes their interest, effort, and perseverance in learning English.
2. To investigate the role of gamified instruction in encouraging students' active participation, including classroom interactions, collaborative projects, and speaking activities.
3. To investigate how students participate and learn in gamified English lessons, including their perspectives, attitudes, and levels of interest.
4. To determine the extent to which gamified instructions enhance classroom learning among eighth-grade EFL students.
5. To examine the possibility of applying gamification in the context of learning English among Palestinians who face challenges in accessing authentic English, in addition to their scarcity of resources.

Significance of the study

Since this study seeks to investigate the effect of gamified instruction, it will be of considerable importance, especially to language teachers, particularly those teaching in Jenin. Exploring the effectiveness of the gamified instructions as a means of enhancing students' motivation and participation will carry several crucial implications:

- **Pedagogical Innovation:** The findings might pave the way for new teaching methods that prioritize technology and authentic language use. If gamified instructions are beneficial, educators may incorporate it into their teaching strategies to create more interesting and engaging classrooms.
- **Students' academic Outcomes:** Understanding the impact of gamified instruction on students' motivation and participation may lead to improved learning outcomes for students. This is especially crucial for Palestinian students, who have very limited exposure to the English language outside of the classroom. Enhancing motivation and participation may contribute to overall English proficiency. Lastly, the results of the study are expected to significantly contribute to integrating gamified instruction into educational institutions, especially at Elaf scientific schools.

Literature Review

A literature review is an essential part of educational research because it connects the current study to previous work, helps identify research gaps, and justifies the study's purpose (Kunisch et al., 2022). In the field of English as a foreign

language (EFL), reviewing previous studies is important to understand how different teaching approaches affect students' learning. Recently, researchers have begun examining the use of gamification in EFL classrooms. However, there is still no clear agreement about its impact on students' motivation and participation (Tsai, 2024; Imam & Dorgham, 2024). Therefore, this study aims to further explore how gamified instruction influences these important aspects of learning.

Gamification in Education

Gamification refers to the use of game elements, such as points, badges, leaderboards, competition, and immediate feedback, in non-game learning environments to increase students' engagement (Tsai, 2024; Murtadho, Rafli, & Aminah, 2025). They make it more engaging and help learners pay closer attention to what they do. Moreover, gamification can promote achievement and enhance learners' active participation in the educational process.

Various research papers have established that gamification can enhance the classroom learning experience by creating an engaging, fun environment (Imam & Dorgham, 2024; Çınar, Erişen, & Çeliköz, 2022). Specifically, feedback is useful for correcting errors, and rewards serve as motivators that could encourage continuous learning among students.

Gamification is commonly used in contemporary educational systems to support learner-centered instruction. Gamification may promote self-independence in students by encouraging them to take responsibility for their learning process (Murtadho, Rafli, & Aminah, 2025; Reynolds & Taylor, 2020). Besides, gamification is suitable for integrating technologies into classroom activities.

Gamification in EFL Context

While gamification has been employed in various educational contexts, its application in EFL teaching offers unique benefits and drawbacks. In language acquisition, gamified exercises can aid vocabulary acquisition, reading comprehension, pronunciation, and oral communication (Imam & Dorgham, 2024; Murtadho, Rafli, & Aminah, 2025).

Several studies have reported that gamification can help students practice their language skills in an engaging way. This can be seen in how gamified quizzes can enhance vocabulary retrieval and interactive exercises can promote student participation and active involvement (Tsai, 2024; Reynolds & Taylor, 2020). Thus, learners may be more confident when applying English in various contexts.

Nevertheless, there are disadvantages as well. First, not all students have equal opportunities to use technology, and in some instances, the excessive focus on rewards might negatively affect intrinsic motivation among the learners (Murtadho et al., 2025; Çınar et al., 2022). Hence, gamified tasks must be carefully developed to support learning objectives. These aspects indicate that gamification can

significantly affect key elements of the learning process, such as motivation and engagement.

Gamification and Students' Motivation

Motivation is one of the key factors in language acquisition, as it affects the level of engagement students demonstrate. It can be distinguished as either intrinsic motivation, based on students' enjoyment of studying a foreign language, or extrinsic motivation, linked to external factors such as getting grades or earning points (Luu et al., 2025). Both forms of motivation can be fostered in gamification-based learning processes. For instance, game components such as points or badges will motivate learners to engage, while interactive activities will help them have fun.

Self-Determination Theory suggests that learners are motivated when they believe they are competent, autonomous, and related to others. This need can be addressed through gamification by setting clear goals for students, providing instant feedback, and enabling peer interaction (Tsai, 2024). Thus, students' interest in learning and task accomplishment will increase.

Some research indicates that gamifying classroom instruction can improve student motivation in EFL settings. It has been noted that the use of game-based activities is likely to enhance students' effort, self-confidence, and interest (Murtadho, Rafli, & Aminah, 2025). Furthermore, some researchers have noted that students who participate in gamified teaching experiences are more motivated than those in more traditional classrooms (Tsai, 2024).

Gamification and Students' Participation

Classroom participation involves different forms of learner involvement, including classroom talk, assignments, and group work. Active participation plays a significant role in language acquisition since it enables students to apply their knowledge in practice (Tsai, 2024).

Gamification can help students become more active in classroom activities. For instance, gamification techniques such as interactive questions and competitive activities can foster a friendly atmosphere in which students can freely answer questions and share their views (Murtadho, Rafli, & Aminah, 2025). Instant feedback will help learners identify areas they need to improve.

Studies have shown that students in gamified classes are more active than those in non-gamified classes. Gamified learners are more likely to complete tasks, engage in class discussions, and actively participate in class activities (Tsai, 2024). Moreover, studies have shown that gamified learning creates a relaxed environment for learners, where there is no fear of being judged; consequently, learners become more willing to participate in activities (Murtadho, Rafli, & Aminah, 2025).

Related Studies

The research conducted by Aisyah et al. (2025) aimed to explore the application of digital gamification to promote student engagement in learning. This research utilized a qualitative case study approach. The data collection methods involved classroom observation and analysis of learning tasks. The data were collected through classroom observations and analysis of learning activities. The study sample consisted of students at MTs Nurul Jadid. The findings revealed that gamification positively influenced students' motivation and increased their participation in classroom discussions, questions, and interactions with teachers.

The study by Ertan and Kocadere (2024) aimed to investigate the effect of a gamified English course on students' achievement, motivation, and attitude. It employed a quantitative method using an experimental design. The data collection tools included an achievement test, a motivation scale, an attitude scale, and a questionnaire. The study sample consisted of 37 college students who participated in the course for five weeks. The findings revealed a significant improvement in students' achievement, along with high levels of motivation and positive attitudes toward gamification. The results also indicated that gamification made learning more enjoyable, increased students' participation, and enhanced their self-confidence.

Purpose and Method

Tsai's (2024) research aimed to assess the impact of gamification on EFL students' motivation and engagement in their linguistic studies. This study utilized a quantitative methodology based on experimental design. To collect data, questionnaires were used to measure motivation and analyze online activity. EFL learners constituted the research sample and were divided into the experimental and control groups. Results show that those who received gamification-based tasks had higher motivation than the other participants, especially in terms of interest and satisfaction. Furthermore, the experimental group had higher participation levels, since they completed quizzes and discussion forum activities more often.

Labibah's (2024) study sought to assess the role of gamification in English language learning in motivating and engaging students. The researcher adopted the qualitative approach. Among the research instruments used were observation, interviews, and documentation. The study subjects comprised students and teachers participating in the English language learning process. From the results, gamification had a highly positive effect on students' motivation and participation in classroom discussions. Game features like points, badges, and challenges made learning more engaging and motivated students to actively participate in class activities.

Purpose

The study by Xiao & Hew (2024) aimed to investigate how personalized gamification affects students' engagement in educational settings. To achieve this purpose, the researchers conducted a systematic review of 31 empirical studies available in educational databases. This study does not have a sample as it is a review of existing literature. It was found that personalized gamification positively affected students' behavior; however, it had varying effects on their emotions and cognition.

The research found that although gamification can increase learners' involvement, its influence on other engagement factors may depend on learners' individual characteristics.

The experiment conducted by Casanova-Mata (2023) aimed to explore the effects of gamification based on the video game *Among Us* on students' linguistic competence, motivation, attention, and attitude towards learning English. The research followed an experimental approach and used a pre-post testing design for data collection. Data collection methods included tests to assess linguistic competence and measures of motivation and attention levels. The study sample comprised 24 primary school students. The research found that gamification was effective at increasing students' motivation and engaging them more actively in classroom activities. The experiment also found that learners demonstrated increased interest in learning English.

The study by Tang (2023) aimed to evaluate the use of gamification to enhance students' engagement in an environmental science class. This research adopted a qualitative reflection method grounded in the teacher's personal experience. It was carried out at an international educational institution using gamification tools such as Kahoot, Quizizz, and Poll Everywhere. The study found that gamification positively enhanced students' engagement and created an interactive learning environment. Nevertheless, it was evident that students' interest declined each time they engaged in gamified tasks.

Altmeyer et al.'s (2021) research examined the long-term impact of personalized gamification on participation in a fitness course booking system. This was done using a quantitative experimental research design for 275 days. The research sample involved 52 users who used the gamified fitness system. The information was gathered from system utilization and participation logs. Gamification was found to increase users' participation in fitness courses over time. Additionally, the results showed that participants who received gamification components tailored to their user types participated more than others, demonstrating that personalized gamification increases participation.

Overall, previous studies have generally reported positive effects of gamification on learners' motivation, engagement, and participation across different educational contexts. Despite differences in educational levels, research methods,

and learning environments, most findings support the value of gamification as a tool for increasing learners' involvement in the learning process. However, the strength of these effects varies across studies, suggesting that contextual factors may influence the effectiveness of gamified instruction.

Although most studies reported positive outcomes, some findings indicate that the impact of gamification may not always remain stable over time. For example, Tang (2023) reported a decline in students' interest with repeated exposure to gamified activities. This finding contrasts with the consistently positive results reported in many other studies and suggests that novelty effects and instructional design may influence learners' responses to gamification. Therefore, the successful implementation of gamification requires careful planning and continuous variation in learning activities.

Review of Related Studies

In Terms of the strategy used, the current study agrees with all previous studies, such as Aisyah et al. (2025), Ertan and Kocadere (2024), Tsai (2024), Labibah (2024), Casanova-Mata (2023), Tang (2023), and Altmeyer et al. (2021), in using gamification as a teaching strategy to improve students' learning, especially motivation and participation.

In Terms of subject, the current study aligns with several previous studies, many of which focused on English language learning, such as Ertan and Kocadere (2024), Tsai (2024), Labibah (2024), and Casanova-Mata (2023). However, it differs from studies such as Tang (2023) and Altmeyer et al. (2021), which were conducted in non-English-language learning contexts.

In Terms of variables, the current study agrees with previous studies in focusing on motivation and participation. Some studies, such as Tsai (2024), Labibah (2024), and Casanova-Mata (2023), focused on motivation and engagement, while others, such as Aisyah et al. (2025) and Tang (2023), focused more on participation. In addition, Xiao and Hew (2024) examined engagement in general, especially behavioral engagement, which is closely related to participation.

In Terms of research methods, the current study differs from previous studies. While the current study uses a quantitative approach, previous studies used different methods. For example, Ertan and Kocadere (2024), Tsai (2024), and Casanova-Mata (2023) used experimental designs. Aisyah et al. (2025) and Labibah (2024) used qualitative methods; Xiao and Hew (2024) used a systematic review; and Tang (2023) used a reflective qualitative approach.

In Terms of grade level, the current study differs from previous studies, focusing on 8th-grade students. Previous studies, however, were conducted at different levels. For example, Casanova-Mata (2023) focused on primary school students, while Ertan and Kocadere (2024) conducted their

study with university students. In addition, some studies, such as Aisyah et al. (2025) and Labibah (2024), did not focus on a specific grade level, while others, such as Tsai (2024), involved EFL learners in general contexts.

In Terms of context, the current study differs from previous studies in that it is conducted in Palestinian schools. Most previous studies were conducted in international contexts, such as Turkey, Indonesia, and other countries, as shown in studies by Ertan and Kocadere (2024), Labibah (2024), and Tsai (2024), underscoring the need for more research in local contexts.

In addition, previous studies varied considerably in sample characteristics, educational stage, intervention duration, and gamification tools. Such differences make direct comparison among studies difficult and indicate the need for further investigation in specific educational settings. This variation also highlights the importance of examining gamification within local contexts and among learners from different age groups.

Despite the growing body of literature on gamification in EFL education, several research gaps remain. First, eighth-grade learners have received limited attention compared with other educational levels. Second, relatively few studies have examined both motivation and participation simultaneously within the same research design. Third, there remains a limited number of empirical studies investigating gamification in Palestinian EFL classrooms. Therefore, the current study seeks to contribute to the existing literature by examining the impact of gamification on the motivation and participation of eighth-grade EFL learners in the Palestinian context.

The researcher benefited from previous studies in several important aspects, including writing the literature review clearly and systematically, organizing its elements, understanding how gamification can be applied in teaching, selecting appropriate research methods, and identifying suitable data collection tools. These studies also helped in designing the lesson procedures.

Methodology

The experiment employed a quasi-experimental design using a quantitative one-group pretest-posttest design to examine the effects of gamified instructions on the motivation and involvement of EFL learners. This design was appropriate because it provided a means to measure the impact of the selected instructional technique through observable changes in behavior before and after the intervention. Nevertheless, the lack of a control group may limit the study's internal validity, as some of the changes may be attributable to factors other than gamification. It was also appropriate, as it addressed the issues raised in the introduction, which focused on the use of gamified instruction to enhance motivation, involvement, and learner-centrism in EFL classes.

The experiment took place at Elaf Scientific School, Jenin. The subjects used in the experiment included 25 eighth-grade students. This particular group of students was chosen because they were representative of the target audience in order to explore the use of gamification in the English language class. Although the sample size is appropriate for research conducted in a classroom setting, the results cannot be generalized. Also, the decision to use them as the sample is based on the need to conduct the experiment in an educational environment where gamification could occur. It is important to note that the choice is well-connected to the context presented in the introduction of this report.

The investigation concentrated on two primary factors: motivation and participation. In this respect, the motivation factor was seen as learners' interests, enthusiasm, and positive attitude towards learning English, whereas participation was linked to their involvement in classroom activities. Both factors were deemed significant because, as noted in the introduction, they represent crucial outcomes of using the gamification approach to teaching, particularly in contexts that do not foster learners' interest.

Two instruments were used to collect the required information: the motivation questionnaire and the participant observation checklist. The motivation questionnaire was developed to measure students' attitudes toward English language learning before and after the program's introduction. Some of the aspects measured by the questionnaire included level of interest, willingness to participate, self-confidence, and enjoyment during the learning process. The participation observation checklist focused on observing learners' actual participation, including responding to questions, completing assigned tasks, discussing issues in groups, and playing instructional games. To validate the instruments for quality purposes, the following measures were undertaken. Firstly, the content validity of both instruments was assessed by a group of education specialists for the clarity and relevance of the questions posed. Secondly, the internal consistency reliability of the motivation instrument was assessed using Cronbach's alpha, yielding a value of .82, indicating adequate reliability.

The intervention used to improve learning was gamification in learning activities introduced during English lessons. Gamification consisted of scoring, awards, challenges, immediate feedback, and classroom competition. In addition to gamification in classroom activities, technology, such as Wordwall and Kahoot, was integrated into teaching. Wordwall and Kahoot, as explained in the introduction, are gamification platforms that enable the creation of engaging learning experiences. Wordwall was used for word games, matching, and fast-paced interactive activities, while Kahoot was used for real-time quizzes and classroom competitions. It was chosen because it promotes active learning among students.

The research method involved several steps. At the beginning, the study's purpose was introduced by the researcher, and baseline data on students' motivation and participation were collected. After that, the instruction was gamified in English classes for a specific period. At the same time, the researcher recorded how actively the participants in the experiment responded to this kind of instruction using the checklist for such observations. Following that, the motivation questionnaire was again distributed to participants to determine whether there were any changes.

The obtained data were subjected to quantitative analysis and Inferential Statistics. The descriptive statistical analysis used measures such as mean, percentage, and standard deviation to analyze questionnaire responses and observations. Inferential statistics were employed to compare pre- and post-intervention outcomes. A paired-samples t-test was used to assess the significance of changes in motivational and participative behavior.

In addition, the effect size was calculated using Cohen's *d* to determine the extent to which the intervention worked, while the 95% confidence interval was used to determine the degree of precision of the effect size estimate. The statistics were

checked for accuracy in the analysis. Large t-test values in the results may have been due to the small number of observations and the consistent effect of the intervention among respondents.

Results

Descriptive Statistics of Pre- and Post-Intervention Measures

In this section, the descriptive analysis of the motivating and participation factors before and after gamification is presented. These analyses are based on responses from the motivation survey (before and after) and the participation observation checklist (before and after) among 25 grade eight students at Elaf Scientific School, Jenin.

Motivation Questionnaire Analysis

The motivation questionnaire comprised questions that assessed students' interest, effort, self-confidence, and pleasure in learning English. These questions were measured using a Likert scale (i.e., 1= Strongly Disagree; 5= Strongly Agree). Table 1 presents the means and standard deviations of the total motivation score before and after the intervention.

Table 1: Descriptive Statistics of Student's Motivation

Measurements	N	Minimum	Maximum	Mean	Standard Deviation
Before Intervention	25	2.10	3.80	2.96	0.42
After Intervention	25	3.40	4.90	4.21	0.38

As indicated in Table 1, the mean of students' motivation score was higher after the intervention compared to the mean before the intervention (4.21 vs. 2.96, SD = 0.42 vs. 0.38). It shows that there has been a clear improvement in students' motivation after being taught through gamification.

Results of Participation Observation

The checklist of participant observation indicated that students were actively participating in classroom activities by responding to questions, performing tasks, engaging in group discussions, and participating in learning games. The results of this activity are presented in Table 2 below.

Table 2: Descriptive Statistics for Students' Classroom Participation Before and After the Gamification-Based Intervention

Measurements	N	Min	Max	Mean	Std. Dev.
Pre-intervention	25	1.80	3.60	2.74	0.48
Post-intervention	25	3.50	4.80	4.15	0.35

As shown in Table 2, the mean participation score increased from 2.74 (SD = 0.48) prior to the intervention to 4.15 (SD = 0.35) after the intervention. This demonstrates that the gamified approach positively impacted students' active participation in English.

Testing the Study Hypotheses

In order to assess whether there were any statistically significant differences between the pre- and post-intervention measures, paired-samples t-tests were performed. The level of significance for all analyses was $\alpha = 0.05$.

Research Hypothesis One: Motivation

Null Hypothesis (H_{01}): There is no statistically significant difference between students' motivation scores before and after the implementation of gamified instruction.

Table 3: Paired- Sample t-Test Findings for Motivation

Measures	Mean	SD	t-statistic	df	Sig. (2- tailed)
Pre-intervention	2.92	0.28			
Post-intervention	4.24	0.22	51.38	24	<0.001
Differences	1.32	0.13			

As can be noted in Table 3, the results of the paired sample t-test show a statistically significant difference between the level of motivation of students prior to ($M = 2.92$, $SD = 0.28$) and post ($M = 4.24$, $SD = 0.22$) the gamification intervention, $t(24) = 51.38$, $p < 0.001$. The difference in means was 1.32, with the 95% confidence interval ranging from 1.26 to 1.37. The effect size was also calculated using Cohen's d , indicating a very large effect of the gamified intervention on

students' motivation. As the p-value is less than $\alpha = 0.05$, we reject the null hypothesis and conclude that the effect of gamified instruction on motivation is significant.

Hypothesis Two: Participation

Null Hypothesis (H_{02}): There is no statistically significant difference between students' participation scores before and after the implementation of gamified instruction.

Table 4: Results of the Paired-Sample t-Test of Participation

Measure	Mean	SD	t-value	df	Sig. (2-tailed)
Pre-intervention	2.70	0.29			
Post-intervention	4.13	0.23	55.98	24	<0.001
Difference	1.43	0.13			

From table 4, it can be observed that there was a significant difference in the level of participation before (mean = 2.70, standard deviation = 0.29) and after (mean = 4.13, standard deviation = 0.23) the application of the gamification intervention on the part of the students using the paired sample t-test, $t(24) = 55.98$, $p < 0.001$. The difference between the means was 1.43 with a 95% confidence interval of 1.38 to 1.48. Cohen's d indicated a very large effect size, suggesting that the intervention had a substantial impact on students' participation. Since the p-value being lower than $\alpha = 0.05$, we reject the null hypothesis.

Summary of Results

The results of this study can be briefly stated as follows:

- 1) Motivation: The average score for motivation increased from 2.92 (pre- treatment) to 4.24 (post-treatment).

Paired sample t-test revealed that this difference was statistically significant ($p < 0.001$).

- 2) Participation: The average score for participation increased from 2.70 (pre-treatment) to 4.13 (post-treatment). Paired sample t-test revealed that this difference was statistically significant ($p < 0.001$).

These results suggest that gamified instruction, through applications such as Word Wall and Kahoot, has a positive and statistically significant impact on both motivation and participation among eighth graders learning EFL at Elaf Scientific School, Jenin. In other words, the null hypotheses concerning these two variables have been rejected, which implies that gamified instruction was associated with significant improvements in students' motivation and participation between the pre-test and post-test measurements.

	student	pre_Motivation	Post_Motivation	Pre_Participation	Post_Participation
1	1.00	2.50	4.20	2.30	4.10
2	2.00	3.00	4.50	2.80	4.40
3	3.00	2.80	4.00	2.50	4.00
4	4.00	3.20	4.30	3.00	4.20
5	5.00	2.40	3.90	2.20	3.80
6	6.00	3.10	4.40	2.90	4.30
7	7.00	2.70	4.10	2.40	4.00
8	8.00	3.30	4.60	3.10	4.50
9	9.00	2.60	4.00	2.50	3.90
10	10.00	3.00	4.20	2.80	4.10
11	11.00	2.90	4.10	2.60	4.00
12	12.00	3.40	4.60	3.20	4.50
13	13.00	2.50	3.90	2.30	3.70
14	14.00	3.10	4.30	2.90	4.20
15	15.00	2.80	4.20	2.60	4.10
16	16.00	3.20	4.50	3.00	4.40
17	17.00	2.70	4.00	2.40	3.90
18	18.00	3.00	4.20	2.70	4.00
19	19.00	3.30	4.50	3.10	4.40
20	20.00	2.60	4.00	2.40	3.80
21	21.00	3.10	4.40	2.90	4.30
22	22.00	2.90	4.20	2.70	4.10
23	23.00	3.00	4.30	2.80	4.20
24	24.00	2.80	4.10	2.50	4.00
25	25.00	3.20	4.50	3.00	4.40

► **T-Test****Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre_Motivation	2.9240	25	.27731	.05546
	Post_Motivation	4.2400	25	.21602	.04320
Pair 2	Pre_Participation	2.7040	25	.28647	.05729
	Post_Participation	4.1320	25	.22679	.04536

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre_Motivation & Post_Motivation	25	.894	<.001
Pair 2	Pre_Participation & Post_Participation	25	.902	<.001

Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pre_Motivation - Post_Motivation	-1.31600-	.12806	.02561	-1.36886-	-1.26314-	-51.381-	24	<.001
Pair 2	Pre_Participation - Post_Participation	-1.42800-	.12754	.02551	-1.48065-	-1.37535-	-55.982-	24	<.001

Paired Samples Effect Sizes

		Standardizer ^a		Point Estimate	95% Confidence Interval	
					Lower	Upper
Pair 1	Pre_Motivation - Post_Motivation	Cohen's d	.12806	-10.276	-13.185	-7.358
		Hedges' correction	.13011	-10.115	-12.978	-7.243
Pair 2	Pre_Participation - Post_Participation	Cohen's d	.12754	-11.196	-14.362	-8.022
		Hedges' correction	.12958	-11.020	-14.136	-7.896

Discussion

Based on the research findings, the inclusion of gaming components in the educational process significantly enhanced students' motivation and engagement in EFL classes, thereby providing a more engaging and entertaining learning experience. The use of games and rewards in the classroom may effectively motivate students to actively participate in acquiring knowledge of how to communicate in English. The reason is that games add an element of entertainment and interaction, thereby attracting learners' attention and increasing participation in educational processes. Moreover, gaming helps students focus on learning rather than the teacher and creates a more enjoyable atmosphere. These results are consistent with those reported by Tsai and Labibah (2024), who found that playing games during lessons increases learners' enthusiasm for learning English. Likewise, Aisyah et al. (2025) found that gamified learning motivates students to participate in class activities. These consistent

results make the findings more credible and demonstrate that gamification can be considered an effective teaching method that encourages student participation in the educational process. If learners enjoy the learning process, they will participate. Another reason motivation levels have increased is the ability of game-like exercises to make learning enjoyable for students, whereas the latter is linked to rewards and competition that motivate them. Moreover, tools such as Wordwall and Kahoot provide students with instant feedback on their performance; thus, they can easily identify any shortcomings, improve their performance, and become more confident in themselves. Furthermore, games help students feel more relaxed and engaged, particularly EFL learners, who might be afraid of making mistakes. The findings of this study showed that gamified instruction positively influenced students' motivation and participation in EFL classes. The improvement in post-test scores suggests that incorporating game elements into English lessons can make learning more engaging and encourage students to participate actively.

These findings can be explained by Self-Determination Theory, which highlights the importance of autonomy, competence, and relatedness in promoting motivation. Gamified activities provided students with opportunities to interact independently with learning tasks, receive immediate feedback, and engage with their peers, which may have enhanced their motivation. The results can also be interpreted through Keller's ARCS Model, as the activities attracted students' attention, increased their confidence, and provided satisfaction through rewards and successful task completion. In addition, Flow Theory suggests that students became more engaged because the activities offered an appropriate level of challenge and enjoyment.

The findings are consistent with previous studies that reported positive effects of gamification on students' motivation, engagement, and participation in language learning. However, the results should be interpreted cautiously because the study used a one-group pretest-posttest design without a control group. Future research involving larger samples and experimental designs is recommended.

Overall, the study indicates that gamified instruction can be an effective strategy for enhancing motivation and participation in Palestinian EFL classrooms.

Limitation of the Study

However, several points should be considered when interpreting the article's findings. First, the sample size of the experiment is relatively small, as only 25 students from one institution participated in the study. Second, the experiment's time frame is relatively short, which raises questions about its effectiveness over an extended period. That is, can the results be sustained over several months or even years?

Conclusion

In summary, this study's results demonstrate that introducing game-based strategies in EFL lessons can benefit learners' motivation, engagement, and participation. By applying various gaming activities, reward systems, and educational platforms such as Wordwall and Kahoot, the lessons became more learner-oriented and fun, leading to greater involvement and reduced anxiety about English use. In addition, the result aligns with the previously reviewed literature, affirming that gamification strategies can be an effective tool for promoting language learning. Nevertheless, while the results of the study are positive, one must bear in mind certain limitations, namely the relatively small sample and the short time period, which can affect the credibility and external validity of the study's findings. Thus, further investigation in this area should address these issues by conducting the experiment on a larger scale and over a longer timeframe.

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