# The Effect of Using Gamification to Improve EFL Students' Academic Performance

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#### **Abstract**

This paper aims to determine whether there is evidence that gamified instruction can be effective in improving EFL students' academic achievement. The aim of the research is to establish how effective gamification is as a method against more traditional types of education and what areas of the English language—for example, reading comprehension, grammar, and vocabulary—are most effectively promoted via the integration of gamification into the classroom environment. The sample included 120 fourth graders from public schools in Jordan, where 60 children were to form the gamified instruction group and another 60 to form the standard instruction group. Pretests and posttests of English language skills using standardized tools measured students at two different times: before and after the instructional interventions. These tests are the main instruments utilized for data collection and analysis. Independent t-test, one-way ANOVA, and one-way MANOVA tests were performed to test the variation and holistic impact of the instructional methods on different components of language learning. The experimental findings support that the gamified instruction group scored significantly higher than the regular instruction group at post-intervention. More specifically, the students of the game-based group scored an average of 74.44 (SD= 7.93) on the posttest, compared to 69.31 (SD = 6.14) for those of the control group. The result for the T-test yields t=4.05 and p<0.001, hence showing that the gamified group had significantly better results. The classroom gamification usage made noteworthy gains in students' vocabulary, grammar, and reading comprehension abilities. One-way ANOVA results were vocabulary, F = 22.65, p < 0.001; grammar, F = 15.78, p < 0.001; and reading comprehension, F = 18.93, p < 0.001. MANOVA supported this finding that the Wilks' Lambda value was 0.62, with an F-value of 20.45 and a p-value less than 0.001, indicating that gamified training was of benefit overall in enhancing English language competence. The results of this research come with a very exciting revelation, such as gamified instruction being an excellent means of teaching English as a foreign language since it enhances students' interest and performance in class.

**Keywords:** Gamified Instruction, English as A Foreign Language (EFL), Student Motivation, Academic Performance, Educational Gamification.

# Introduction

As English is considered by educational systems in non-English speaking countries to be crucial for their students' academic and professional lives, EFL education has been directed toward core pursuits. Traditional methods usually do not involve the student and are thus less effective in developing language abilities (Huang et al. 2024). Considering this, new methods to improve student results are being sought by educators, with educational games coming to the forefront as one of the most promising techniques (Sailer & Homner, 2020; Dichev & Dicheva, 2017).

Educational gaming is simply the transfer of game design elements into non-game contexts. It reportedly has gained interest in educational settings, especially over the past few years (Deterding et al., 2011). This approach builds on strong motivational drives prevalent in games to further the support of students' engagements and learning outcomes (Hamari et al., 2014). This approach becomes very relevant to the teaching of EFL, where interest and motivation among students are needed constantly (Chapman & Rich, 2018).

Research has shown that educational games can increase students' motivation to engage in the learning process and improve their academic performance (Anderson et al., 2000; Kim et al., 2021). In a study by Seaborn and Fels (2015), it was found that the use of game elements such as points, levels, and rewards can

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improve students' engagement and interaction with educational content (Oliveira et al., 2023; Landers, 2015). This suggests that incorporating games into education can have a significant positive impact on student learning (Smiderle et al., 2020).

The prominent problems in the curriculum and learning environment in the Jordanian context have resulted in setbacks to students learning English as a foreign language (Al-Hawamdeh & Hamdan, 2023; Al-Omari et al., 2022), but some recent studies suggest that educational games can be an effective solution (Alsawaier, 2018). In a study among Jordanian school students, it was evident that educational gaming played a major role in enhancing students' English language skills and motivating them to learn (Alabbadi et al., 2023).

Moreover, good design of educational games is also essential in the realization of desired results. The games should be designed in such a way that there is a fine balance between the level of challenge and level of reward to make students feel like continuing to learn further as reported by Huang et al. (2018).

By using a mixed-method sequential explanatory research design, Temel and Cesur (2024) grounded their study on a quasi-experimental approach in order to explore the potential influence of gamification via Web 2.0 tools—Kahootl, Socrative, Quizizz, and Mentimeter—on motivational and academic achievement levels of EFL learners in online learning environments. The sample consisted of nearly sixty first-year students at a Turkish state institution participating in this study. Such information was elicited with the help of a rating scale, an Achievement Test, and a semi-structured interview. The quantitative data were analyzed with statistical measures, whereas the qualitative data were analyzed by the content analysis approach. Results of the research showed that the experimental group had better results in achievement test compared to the control group, and their motivation and interest in the course is significantly higher after undergoing the treatment with gamified Web 2.0 tools.

Examining the current research on gamification in educational contexts, Jaramillo-Mediavilla et al. (2024) want to emphasize its effect on motivation and academic achievement. A Systematic Literature Review (SLR) was conducted utilizing three interdisciplinary databases: Scielo, Web of Science, and Scopus, in accordance with the PRISMA statement. The quality, inclusion, and exclusion criteria led to the selection of nine SLR papers on gamification that deal with either student motivation or academic performance, the two main variables. Articles were published in English or Spanish between 2016 and 2022 and were open access; their content was directly relevant to the study issues. Gamification, according to the findings, has a major impact on students' motivation by making it easier for them to absorb new information and improve their academic competencies—a broad term that encompasses a variety of skills that are crucial for academic success and can be developed via engaging in fun and interactive learning activities. Cognitive, self-learning, social, and collaborative abilities are only a few examples. To successfully integrate gamification in the classroom, one must be creative and adaptable, according to the authors.

The purpose of the study by Permana et al. (2024) was to examine the effects of gamification on EFL teachers' perceptions of their students' progress in the subject and on students' actual performance in the language. This study used a combination of quantitative and qualitative techniques, including a pretestposttest experimental design and semi-structured interviews. A total of 43 primary school children and 2 English instructors from a single private Bali school participated in the research. This study used a combination of a multiple-choice exam, a performance-based exam, and an interview guide to gather data. The study also included a rubric to evaluate the students' writing and speaking abilities. Overall English scores improved from the pretest (M=70.53, Std=8.174) to the posttest (M=73.70, Std=7.812), according to the study. A significant difference in mean score between the pretest and posttest was also supported by the findings of the paired t test (Sig < 05). Teachers said that their students were enthusiastic, involved, and focused as they studied. Results showed that gamification had a favorable effect on students' English proficiency, and instructors were receptive to using it in the classroom. The findings provide a substantial contribution to the larger discussion around innovative teaching methods and how they positively impact student engagement and learning outcomes.

Chan & Lo (2024) This systematic review, utilizing a rapid evidence assessment methodology, critically examines thirty empirical studies from the Web of Science, spanning the years 2010 to 2022. It aims to

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synthesize the current body of research on the incorporation of gamification into EFL/ESL pedagogy. The Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) was followed when conducting this study to provide a comparative study on the methodology and results of systematic reviews on the use of various digital gaming platforms in China, Malaysia, the United Arab Emirates, Korea, the Netherlands, Saudi Arabia, Iran, Spain, Turkey, and Ecuador. The synthesis of studies under review identifies a spectrum of gamification components incorporated within the educational frameworks. Our analysis reveals an ascending trajectory in the prevalence of gamification within this academic sphere and corroborates its efficacy as a catalyst for language acquisition. The synthesis of studies under review identifies a spectrum of gamification components incorporated within the educational frameworks.

Petrusly et al. (2024) conducted a study investigates how gamifying Kahoot would affect students' critical thinking abilities, using motivational and engagement mediators. It represents a survey completed by 329 students from the public university in Lombok. The set hypothesis of this study was analyzed using the method of structural equation modeling. The findings indicated that Kahoot gamification would directly and indirectly influence students' critical thinking ability via motivational and engagement mediators. The expected outcome of the study is an optimized, gamified platform for improving instructional quality.

Huseinović (2023) claimed that Gamification is a concept that has rapidly grown in popularity and today has numerous applications in ICT, health, marketing, education, and business. The core tenet of the concept is to integrate elements of games into non-game environments with the key objective of forming behavioral tendencies, improving motivation, and increasing engagement. The research is done to identify the role played by gamification in motivating students towards learning, as well as their academic performance in teaching EFL at HEIs in Bosnia and Herzegovina. The research in this study will be done on 202 properly chosen students at private and public universities in Bosnia and Herzegovina, using targeted snowball sampling techniques. The questionnaire to these subjects also contained items 57 in number from diverse domains that include scholastic achievement, frequency and ability in the use of apps for learning languages, motivation, attitude towards learning languages through apps, and perceived improvement in listening, speaking, reading, and writing. This is attributed to the use of apps to learn the English language. The data were analyzed using descriptive statistics, normality tests, reliability analysis, and linear regression. The results obtained in this study show the great effect of the gamification strategies on learners' motivation to learn English as a foreign language and their overall success in EFL learning/academic achievement. Implementing games in higher education has brought about positive effects on students' listening, speaking, reading, and writing. Furthermore, gamification is responsible for motivating students and, hence, increasing their performance. The infusion of games into education is likely to further develop over time, leading to some really transformative changes in curricula, teaching methods, and models of learning. In the light of this, the acquisition of ICT skills among academic staff cannot be underrated if they are to mentor students effectively and ensure successful educational experiences.

In a study conducted by Dreimane & Upenieks (2022), it was found that carefully designed educational games can enhance students' active engagement and increase learning effectiveness (Hwang et al., 2015). This study is based on this background and aims to explore the potential of gamified learning in improving students' academic performance in English as a foreign language in Jordanian public schools. By analyzing the impact of gamified learning on students' vocabulary, grammar, and reading comprehension skills, the study aims to provide valuable insights into how to improve English language teaching using this innovative method (Erhel & Jamet, 2013).

In light of previous studies, it is clear that educational games are not only a means of motivating students, but can also be a powerful tool for promoting active learning and engagement (Huseinović, 2023; Huang et al., 2018). Educational games can help develop students' critical thinking skills and improve their ability to solve problems (Dreimane & Upenieks, 2022; Hanus & Fox, 2015). This suggests that integrating educational games into the curriculum can provide a comprehensive and integrated learning environment (Huseinović, 2023).

Concentrating on English as a Foreign Language (EFL) classes, this study provides significant theoretical advances to our understanding of gamification in education. This research adds to the growing body of

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evidence supporting the integration of game-based learning elements into traditional educational methods by examining the impact of gamification on students' inherent motivation, degree of involvement, and ultimate academic performance. The present study supports the notions that emphasize the cognitive and motivational benefits of gamified learning environments by presenting empirical data demonstrating gamification can enhance language acquisition across several areas, such as reading comprehension, grammar, and vocabulary.

In practical terms, this study provides significant insights for educators, curriculum developers, and policymakers in the education sector. The validated efficacy of gamified instruction in enhancing the academic achievement of EFL students implies that integrating game components into the curriculum may be a feasible approach to tackle the difficulties linked to conventional teaching approaches, namely in motivating students and enhancing their language proficiency. This paper offers a pragmatic strategy for incorporating gamification in Jordanian schools and comparable educational environments to improve student involvement and academic achievements. Furthermore, the data provided could motivate educational institutions to allocate resources towards the creation and implementation of gamified learning technologies as a component of their teaching methodologies.

It is in this respect that this study tries to fill a literature gap on teaching the English language in the Jordanian environment by investigating the use of educational games as one of the means to enhance the motivation and academic performance of students. This research, therefore, tries to give some lines of proof on the effectiveness of this method to motivate teachers and education practitioners to innovate teaching methods for the sake of upgrading the learning experience as well as enhancing the students' English-language skills (Sailer & Homner, 2020).

# The Study Problem

The struggle to successfully involve pupils in studying English as a foreign language brought forward a serious problem with the present educational processes. Traditional teaching approaches are commonly associated with poor academic performance and a lack of interest in learning English. In spite of several developments in the education sector, the absence of efficient teaching practices to ensure high engagement of students for better learning outcomes continues to prevail. This situation therefore calls for immediate needs of new methods of teaching English. Gamification, the incorporation of game aspects into educational activities, has been noted in a number of settings to increase student engagement and motivation, but surprisingly, there has been a general lack of research on its efficacy in the context of teaching English within Jordanian schools. The present research work tries to look into the potential of gamified instruction in enhancing students' academic performance in English. This study is conducted to find out which aspects of learning English, be that grammar, reading comprehension, or vocabulary, are brought out best by a gamified approach; at the same time, compare the outcomes of gamified training against conventional teaching approaches. It will try to analyze these elements to extract some useful ideas from the possibilities of gamification as a very revolutionary approach that could better suit the needs of young students and improve their English language skills.

#### Questions of the Study

The study seeks to answer the following questions:

- What is the mean difference in test scores between students who received gamified instruction and those who received traditional instruction over a prolonged period?
- Which specific areas of English language learning (e.g., vocabulary, grammar, reading comprehension) exhibit the greatest mean improvement in scores following gamified lessons?

# Methodology

Study Sample

The sample was comprised of 120 students equally divided into two groups. 60 students taught by gamification and 60 by the traditional method. This sample included a diverse group of 4th-grade pupils; both males and females attending governmental schools in Jordan.

Sampling Methods: To ensure the representativeness of the sample of English as a Foreign Language (EFL) students from Jordanian public schools, the study employed a stratified random sampling technique. Following the screening process, a cohort of 120 fourth-grade students were selected to partake in the research. The sample was subsequently divided into two groups, one group being exposed to gamified intervention and the other group receiving conventional training. In order to guarantee inclusive representation of both male and female students, as well as students from diverse schools, the study employed stratified random sampling. Implementing this approach decreases the probability of prejudice in the sampling procedure and ensures that the sample accurately represents the demographics of the broader student population.

Study Tool

A variety of data collection and analysis strategies were employed in this study to evaluate the efficacy of gamified training with that of more conventional approaches to education.

Pretests and Posttests: To assess students' aptitude in English language acquisition both prior to and following instructional interventions.

Statistical Treatment

*T-Tests:* These were used by the authors to examine differences in mean test scores between the group that underwent gamified training and the one that had traditional instruction, and to examine changes in scores from pretest to posttest in both groups.

ANOVA Analysis of Variance: To compare, within the areas of English language learning, posttest scores in vocabulary, grammar, and reading comprehension between the group with gamified training and traditional education.

MANOVA: This will be used to check for an overall effect of gamified training across several dependent variables at once.

Results of Study

Results Related to the First Question: What is the mean difference in test scores between students who received gamified instruction and those who received traditional instruction over a prolonged period?

Table 1: Summary Statistics for Pretest and Posttest Scores

Group	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Gamified	64.77	9.51	74.44	7.93
Traditional	64.74	10.12	69.31	6.14

Table 1 presents a comprehensive comparison of the results obtained by students who received gamified education and those who received traditional instruction, both before and after the instruction. The group that received gamified teaching had an average pretest score of 64.77, with a standard deviation of 9.51.

After the instruction, their average posttest score climbed dramatically to 74.44, with a lowered standard deviation of 7.93. This indicates a more consistent improvement in their performance. The conventional instructional group initially had a pretest mean score of 64.74 and a standard deviation of 10.12. Their posttest mean score rose to 69.31, accompanied by a decreased standard deviation of 6.14, indicating improvement, albeit not as much as the gamified group. The group that participated in the gamified education showed a higher average gain in scores (9.67 points) compared to the group that received traditional training (4.57 points). Additionally, the gamified group demonstrated more consistent improvement in performance, indicating that gamified instruction may be more helpful in increasing academic accomplishment.

Table 2: T-Test Results for Posttest Scores

Comparison	t-statistic	p-value
Posttest Gamified vs. Traditional	4.05	< 0.001
Pretest vs. Posttest Gamified	12.08	< 0.001
Pretest vs. Posttest Traditional	7.24	< 0.001

Table 2 displays the t-test outcomes for posttest scores, comparing various instructional approaches and the alterations from pretest to posttest within each group. The t-statistic for comparing posttest scores between the gamified and traditional instruction groups is 4.05, with a p-value of less than 0.001, showing a statistically significant difference in favour of the gamified group. In the gamified group, the t-statistic for the pretest versus posttest scores is 12.08, with a p-value of less than 0.001. This indicates a significant improvement in scores after receiving gamified teaching. Similarly, the comparison between the pretest and posttest scores in the traditional instruction group shows a t-statistic of 7.24, with a p-value of less than 0.001. This indicates a substantial increase in scores after receiving traditional training. The data collectively indicate that both instructional strategies resulted in considerable gains in scores, with gamified training having a more pronounced effect.

Results Related to the Second Question: Which specific areas of English language learning (e.g., vocabulary, grammar, reading comprehension) exhibit the greatest mean improvement in scores following gamified lessons?

Table 3: Summary Statistics for Specific Areas of English Language Learning

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Group	Area	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD
Gamified	Vocabulary	65.67	9.86	78.13	8.56
Traditional	Vocabulary	65.34	10.01	72.02	7.23
Gamified	Grammar	65.45	9.72	73.12	7.65
Traditional	Grammar	65.98	10.14	69.34	6.11
Gamified	Reading	65.89	9.58	75.23	8.09
Traditional	Reading	65.47	10.23	71.04	6.45

Table 3 reports descriptive statistics related to some facets of the English language acquisition process. In the lexical domain, the pretest average score of the group attending the gamified training was 65.67, with a standard deviation of 9.86; the average posttest score was 78.13, with a standard deviation of 8.56. By comparison, the group that received traditional teaching had an average pretest score of 65.34 (standard deviation = 10.01) and an average posttest score of 72.02 (standard deviation = 7.23). The gamified group showed a significant improvement in grammar, with the average score increasing from 65.45 (standard deviation = 9.72) before the intervention to 73.12 (standard deviation = 7.65) after the intervention. In contrast, the traditional group had an average score of 65.98 (standard deviation = 10.14) before the intervention and 69.34 (standard deviation = 6.11) after the intervention. In the reading area, the group that used gamification boosted their average score from 65.89 (standard deviation = 9.58) before the test to 75.23 (standard deviation = 8.09) after the exam. On the other hand, the group that used traditional methods improved their average score from 65.47 (standard deviation = 10.23) before the test to 71.04

(standard deviation = 6.45) after the test. The results suggest that the use of gamified training resulted in more significant enhancements in all areas when compared to traditional instruction.

Comparison t-statistic p-value Vocabulary Posttest Gamified vs. Traditional 4.56 < 0.001 Grammar Posttest Gamified vs. Traditional < 0.001 3.89 Reading Posttest Gamified vs. Traditional 4.15 < 0.001 Vocabulary Pretest vs. Posttest Gamified 14.34 < 0.001 Vocabulary Pretest vs. Posttest Traditional 9.21 < 0.001 Grammar Pretest vs. posttest Gamified 11.23 < 0.001 Grammar Pretest vs. posttest Traditional 6.98 < 0.001 Reading Pretest vs. posttest Gamified 12.67 < 0.001 < 0.001 Reading Pretest vs. posttest Traditional 8.34

Table 4: T-Test Results for Specific Areas

Table 4: Independent Samples t-Test Results for Various Constructs of English Language Skills The t-test value for comparing the posttest vocabulary scores between the gamified and traditional training groups is 4.56, where p-value = 0.000 < 0.001, hence it is significant, and the difference favors the gamified group. Similarly, the t-statistic for Grammar posttest scores was 3.89 with a p-value less than 0.001, showing significant improvement for the gamified group. Further, the t-statistic for reading post-test scores was 4.15 with a p-value less than 0.001, again showing significant increases for the gamified group. There were significant improvements in pretest versus posttest scores for each group separately. For vocabulary, the gamified group was at a t-statistic of 14.34, where the p-value was < 0.001; for the traditional group, it was 9.21, p < 0.001. In the case of grammar, the t-statistic was 11.23 for the gamified group and 6.98 for the traditional, both at p < 0.001. Finally, when it comes to reading, the value of the t-statistic in the gamified group is 12.67 (p < 0.001) and for the traditional group, it equals 8.34 with p < 0.001. From these results, it has been learned that gamified training is much more effective compared to conventional ones in increasing students' vocabulary, grammar, and reading comprehension.

Table 5. Summary of ANOVA Results for Specific Areas

Area	F-statistic	p-value
Vocabulary	22.65	< 0.001
Grammar	15.78	< 0.001
Reading	18.93	< 0.001

Table 5: ANOVA Results on Specific Domains of the English Language Acquisition Mapping Effectiveness of Gamified Pedagogical Practices The F-statistic, as resulted from the ANOVA analysis for vocabulary, was 22.65 with a p-value less than 0.001. This shows that the difference in the vocabulary scores among groups taught by gamified pedagogy and those instructed by traditional pedagogies is significant. The grammar analysis produced an F-statistic of 15.78, which was statistically significant at p < 0.001. In the same way, reading comprehension analysis gave the F-statistic of 18.93, statistically significant at p < 0.001. Indeed, findings validate that gamified learning has significantly improved vocabulary, grammar, and reading comprehension abilities compared to traditional teaching approaches.

Table 6. Summary of MANOVA Results

Multivariate Test	Value	F-statistic	p-value
Wilks' Lambda	0.62	20.45	< 0.001

Table 6 shows the results of a MANOVA analysis, which examines the combined effect of gamified education on a number of dependent variables such as vocabulary, grammar, and reading comprehension. The multivariate test using Wilks' Lambda was 0.62, with an F-statistic of 20.45 and a p-value less than

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0.001. This would, therefore, mean there is a statistically significant effect of gamified training on combined language learning outcomes. It means that gamification significantly enhances general English language competence compared with traditional methods of instruction.

## Discussion of the Results

The study provides strong evidence that the gamified instruction makes huge differences in students' academic achievements, especially in the setting of English language learning, compared to those with traditional methods of teaching. This was evident, since findings showed that the post-test score averages increased by 9.67 for the gamified group, while that of the traditional instruction increased by an average of 4.57 points. This large difference is further validated by the results of the t-test, indicating that gamified instruction has a statistically significant advantage over traditional instruction in enhancing academic outcomes.

It also discusses in detail the sub-areas of English language learning, such as vocabulary, grammar, and reading comprehension, in which gamified instruction seems to make the most prominent differences. Among these areas, improvement in vocabulary was the most significant; it is really a very important part of learning a language. This supports Huang et al. (2018), who pointed out that the well-designed educational gaming will keep students engaged and constantly making progress in learning. The findings are supported by Temel and Cesur (2024), which concluded that gamification tools such as Kahoot! and Quizizz drastically raise the motivational and academic achievement levels of EFL learners. Equally, Chan & Lo, 2024, in their systematic review, revealed that gamification in EFL/ESL pedagogy is increasingly practiced and effective in enhancing the language acquisition of every educational setting.

The results of the statistical analyses support the findings, among them ANOVA and MANOVA. All areas on F-statistics show vocabulary, grammar, and reading comprehension with significant improvements in the gamified group, suggesting that this is a very effective instructional method not only in one area but across multiple facets of language learning. In particular, while MANOVA results—one of them Wilks' Lambda—indicate a statistically significant overall effect of gamified education on combined language learning outcomes, due to that, the idea of gamification enhancing general English language proficiency is further enhanced.

These results demonstrate agreement with much of the literature available on gamification in education. Alabbadi et al. (2023) affirm that educational gaming greatly enhances the English language skills of Jordanian students, especially their vocabulary and reading comprehension. Huseinović, 2023, provided insights into the role of gamification more generally in student motivation and academic performance, showing how gamified learning strategies implemented within the curriculum might give way to transformative changes in teaching methods and learning outcomes. Moreover, the results of the study are also in line with the outcomes of Petrusly et al., 2024, where the use of gamified platforms like Kahoot! Not only do they engage students, but they are also motivational and engagement mediators that enhance the critical thinking abilities of the student.

Further meta-analyses conducted by Sailer & Homner, 2020, and Dichev & Dicheva, 2017, provide further evidence of the efficacy of gamification in learning environments. In each case, such studies concluded that gamification had a significant positive effect on learning outcomes, unrelated to the context of its educational application, which this research supports. That findings across the array of studies are relatively homogeneous in this regard underlines the reliability and validity of this inference that gamified instruction represents a very powerful means for students' enhanced classroom engagement, motivation, and academic achievement.

In other words, it clearly indicates that gamified instruction is much more efficient at elevating English language learning outcomes compared to conventional instructional methods. The incremental vocabulary, grammar, and reading comprehension, supported by strong statistical analyses, suggest that gamification does more than motivate the students; it brings substantial academic improvement too. The results are thus put in concurrence with a wide spectrum of literature showing the potential of gamification as a

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transformative educational strategy that is going to bridge the chasm in how languages, and specifically English as a Foreign Language, are taught and learnt. Provided that education stakeholders have been incessantly searching for new ways of teaching, the incorporation of gamified learning strategies is likely to open up new avenues through which improved quality of education and enhanced student outcome will be achieved.

#### Conclusion

The results show that gamified learning is great for English as a foreign language (EFL) students' grades, especially when it comes to improving their reading comprehension, grammar, and vocabulary. Results from a battery of strong statistical analyses, including t-tests, ANOVA, and MANOVA, show that gamification outperforms more conventional forms of instruction on posttests and increases student engagement and motivation. The results provide credence to the idea that gamified techniques can be a useful tool in the fight against the difficulties inherent in EFL classrooms. Educators, curriculum creators, and legislators seeking to improve learning outcomes in English as a foreign language (EFL) classes can benefit greatly from the study's findings, which add to the increasing amount of research demonstrating gamification as an effective pedagogical technique.

Based on the findings, it seems that adding gaming aspects to the curriculum can boost learning outcomes, particularly when it comes to language acquisition. The scalability and long-term effects of gamification in more generalized educational settings could be the subject of future studies.

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