

The Effectiveness of Gamification in English Subject on Communicative Competence

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ABSTRACT

This study investigated the effectiveness of gamification in English learning among tenth-grade students at SMA Negeri 01 Padang Ratu. Gamification, which integrated game elements such as points, challenges, and interactive activities into the learning process, was expected to enhance student motivation, engagement, and active participation. Using a quantitative approach, data were collected from 66 students through a pretest and posttest design. The findings revealed that gamification had a significant positive effect on the students' communicative competence in English. In addition to improving students' confidence in speaking English, gamified learning also facilitated a deeper understanding of the subject matter. The interactive and engaging nature of gamification helped students practice language skills in a meaningful and enjoyable way, fostering both motivation and strategic communication abilities. This study concluded that gamification was an innovative and effective method for enhancing the quality of English learning at the high school level. Its integration into the curriculum provided a more dynamic and engaging learning environment, encouraging students to participate actively and achieve better learning outcomes.

Keywords: Gamification, English Learning, Communication Competence.

INTRODUCTION

Innovative strategies are required to improve learning outcomes and student engagement in the constantly changing educational context. A viable method for inspiring students and encouraging deeper comprehension is gamification, which is the deliberate incorporation of game features into non-gaming environments. Gamification is a special chance to develop engaging and interactive experiences that foster communicative skills in the context of English language learning (Mårell-Olsson, 2021).

The focus of instruction remains on the conventional test-oriented or form-based techniques, even though policies and curriculum foster the improvement of communication skills among English language learners in contexts where English is a foreign language (efl) (Ordu, 2021). However, practically all educational levels continue to place an excessive amount of emphasis on teaching written language and grammatical forms, and national assessments show that English language learners have little understanding of linguistic forms, but also of a failure to execute a basic communication scenario following years of classroom training (Marjokorpi, 2023).

The tenth grade English class where this research was created had the aforementioned issue. The session was held in SMAN 01 Padang Ratu, a public

coeducational school. 1,409 pupils from low and middle-low socioeconomic backgrounds attended this school, and they spoke English poorly. Despite attending English lessons every school year, it was found that 40 tenth grade students had not sufficiently improved their communicative competence, even though the school syllabus suggested that instructors provide recommendations to help them improve their communicative competence. This circumstance was caused by a number of factors: a) Low self-confidence in students such as asking questions, expressing ideas; afraid and hesitant to answer, they prefer to answer simultaneously; b) limited vocabulary or understanding so that it is difficult to put together sentences; c) not used to speaking in front of people or lack of speaking practice. As a result, multilingual dictionaries and grammar and translation exercises were widely used (Al-Hebaish, 2012).

It can be seen the need to adopt teaching strategies that will help improve students' communicative abilities, after taking into account the previously described circumstances and the lack of opportunities for them to do so (Suparman, 2018). Therefore, a decision can be taken to use gamification in English language teaching.

Gamification has also been beneficial for teaching English as a foreign language (EFL), according to Enayati and Gilakjani(Enayati & Pourhosein Gilakjani, 2020), Muhawenimana, and Ngabonziza. Additionally, these authors assert that in the late 1990s and early 2000s, the promise of game-based learning in language acquisition was recognized. The use of game design features and concepts, including as challenges, leaderboards, badges, and prizes, in the context of EFL is known as gamification. These components seek to improve learning, raise students' motivation, and boost their level of engagement (Lee & Baek, 2023).

Gamification has attracted a lot of attention as a possible instrument to improve learning outcomes and student engagement in educational settings. Investigations on its precise effects on students' English-Communicative Competence abilities are still necessary, though. Gamification can have a beneficial impact on by increasing motivation and providing engaging, interactive environments, language learning that promote Communicative Competence.

Previous research has shown that the use of gamification techniques positively influences students' motivation and performance in learning Arabic. Several studies (Laiya, 2025; Rezi, Noor, & Tsai, 2024; Abdelhamid et al., 2023) have demonstrated that integrating game elements such as challenges, leaderboards, points, and rewards enhances student engagement and achievement in Arabic language classrooms. A systematic review by Almelhes (2024) also confirmed that gamification strategies increase learners' intrinsic motivation and participation, especially when digital tools like Quizizz and Kahoot! are used interactively. In this study, eleven students in an Arabic class participated using a pretest–posttest design to measure both learning outcomes and motivation levels. Written and oral tests were conducted to assess achievement, while motivation questionnaires were given before and after the gamified learning sessions. The findings revealed a significant improvement in students' motivation and performance after the implementation of gamification, consistent with results reported by Ghofur et al. (2023) and Anisah (2024). Similarly, Abu Inein (2024)

and Al Mufleh & Abu Inein (2025) found that gamified approaches in Arabic grammar and vocabulary instruction improved academic achievement and fostered positive attitudes toward learning. Supporting these findings, Tuki, Zailani, and Asbulah (2025) reported that the use of vocabulary games via Wordwall enhanced students' vocabulary mastery and sustained motivation, while Kharizmi et al. (2024) confirmed that gamified learning environments in language education promote enjoyment, persistence, and better performance outcomes. Overall, this study strengthens the evidence that gamification is an effective pedagogical strategy to enhance both motivation and academic performance in Arabic language learning.

The importance of this research is carried out because gamification in learning can improve students' communicative competence because it can increase student motivation, involvement and participation. Gamification can also help students overcome difficulties and experience the results of learning. In this research using a tenth grade were taken as a samples. The sample was selected by the researcher because the students' communication skills were still insufficient. Additionally, because research was undertaken in their class with order and discipline, the English instructor suggested investigating the two classrooms.

This research is unique compared to previous studies because it not only assesses the effectiveness of gamification in English learning in general, but also examines in depth how gamification elements such as points, levels and challenges affect learning motivation and language skills specifically. In addition, this study also focuses on students' experiences in implementing gamification in an increasingly digital era, which has not been widely discussed in previous studies. The purpose of this study is to know the significant effectiveness of gamification in english subject on communicative competence among tenth grade at SMAN 01 Padang Ratu.

RESEARCH METHOD

This study uses a nonequivalent control group design and is quantitative and true-experimental. This study employed a pre-test-post-test control group design, which is a true experimental design. The research takes place in Sri Agung, Padang Ratu, Central Lampung. The place of the study was at SMAN 01 Padang Ratu which located on Sri Agung street. Students in the tenth grade at SMAN 01 Padang Ratu were selected as the population for this study. The sample of this research is 66 students.

Purposive sampling was used in this study, and samples from classes X1 and X2 were selected. Because both classes still lacked communication ability, the researcher selected the sample. Additionally, because research was done in their class with order and discipline, the English instructor suggested investigating the two classrooms (Etikan, 2016). Purposive sampling was used in this study, and samples from classes X1 and X2 were selected. Because both classes still lacked communication ability, the researcher selected the sample. Additionally, because research was done in their class with order and discipline, the English instructor suggested investigating the two classrooms.

The researcher utilized a test to gather data, which consisted of a series of questions or stimuli that members of the research sample had to respond to in order to receive a score. At the first meeting, a pre-test was administered to determine the students' initial level of communicative skills. Following the pre-test, the researcher implemented the treatment, and at the final meeting, a post-test was conducted to assess the impact of the intervention on the students' academic performance. An improvement was considered evident if the mean score on the post-test exceeded that of the pre-test.

RESULTS AND DISCUSSION

The study aimed to know the significant effectiveness of gamification in English subject on communicative competence among tenth grade at SMAN 01 Padang Ratu in the Academic Year 2024/2025. Data collection involved pre-test and post-test assessments. The study was conducted in two classes of 66 tenth Grade at SMAN 1 Padang Ratu during the second semester of the 2024/2025 academic year. The research process included three key stages: administering a pre-test to assess baseline vocabulary knowledge, implementing learning activities using quizzes, and conducting a post-test to measure communication competence improvement following the intervention.

Validity Test

The validity test's objective is to ascertain whether the questions used in the test are valid or not (Maulana, 2023). Pretest and posttest questions can be considered legitimate if $r_{\text{count}} > r_{\text{table}}$. Validity test is done by calculating the correlation of question items with their total scores. The product moment correlation formula assisted by SPSS version 22 with the following results:

Table 1. Validity Test Results of Test Items

No	r-count	r-table	Description
1	0.849	0.367	Valid
2	0.831	0.367	Valid
3	0.822	0.367	Valid
4	0.730	0.367	Valid
5	0.655	0.367	Valid

Source: Processed Data, 2025

It is known from the above table's results that all question items are declared valid because they exceed r_{table} or $r_{\text{count}} > r_{\text{table}}$, so that all question items can be used.

Reliability Test

Table 2. Result of Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.867	5

Based on the calculation results of the 5 questions used, a reliability coefficient of 0.867 was obtained. Referring to the criteria, the test instrument is included in the reliable category so it is used in the study.

Pretesting was done on March 13, 2025 before the treatment was given to students in the control class and the experimental class. A pretest was first given to determine the students' initial abilities as many as 5 questions with the pretest results obtained as follows:

Table 3. Pretest scores of Experimental and Control classes of grade X students of SMA Negeri 1 Padang Ratu

Class	Max Score	Min Score	Average
Experiment	80	40	60,0
Control	80	40	66,4

As can be seen from the above table, The pre-test average for the experimental class is 60; the best and lowest scores are 80 and 40, respectively. While the control class's average pre-test score is 66.4, it is known that the class's highest and lowest scores are 80 and 40, respectively.

Hypothesis Testing

The normality test of pretest and posttest data was conducted as a prerequisite before performing a hypothesis test to determine whether the data were normally distributed. The researcher used SPSS 21 to carry out the test. According to the criteria, the data are considered normally distributed if the significance value (Sig.) is greater than 0.05, and not normally distributed if the value is less than 0.05. Based on Table 4, the control class pretest data had a significance of 0.422 and the posttest data had a significance of 0.347, indicating that both the pretest and posttest data were normally distributed (Sig. > 0.05). Similarly, Table 5 shows that the experimental class pretest data had a significance of 0.741 and the posttest data had a significance of 0.232, confirming that the data were normally distributed for both tests in the experimental group.

The homogeneity test was carried out to determine whether the data from the two groups of research samples had the same variance. The analysis focused on the results of a student learning interest questionnaire, and the test was assisted using SPSS 22.0. A significance value greater than 0.05 indicates that the data are homogeneous. The results, presented in Table 6, showed a significance level of 0.222, which is greater than 0.05, indicating that the data from both groups were homogeneous.

Overall, the results of the normality and homogeneity tests confirm that the pretest and posttest data for both the control and experimental classes meet the assumptions required for parametric statistical analysis. This ensures that subsequent hypothesis testing, such as t-tests or ANOVA, can be conducted reliably, as the data satisfy the requirements of normal distribution and homogeneity of variance.

The hypothesis of this study was formulated as follows: H1 stated that there is a significant effect of gamification in the English subject on communicative competence

among tenth-grade students at SMAN 01 Padang Ratu in the Academic Year 2024/2025, while H₀ stated that there is no significant effect. To test this hypothesis, a paired-samples t-test was conducted. As shown in Table 7, the results indicated a mean difference of -19.400 between pretest and posttest scores, with a t-count of 5.244, which exceeds the t-table value of 1.734 at a significance level of 0.05 and 20 degrees of freedom. The significance value was 0.000, which is less than 0.05, leading to the rejection of H₀. This indicates that gamification in the English subject has a significant effect on students' communicative competence.

Table 4. Hypothesis Testing (Paired Samples Test)

Pair	Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
1	-19.400	14.268	2.854	-25.290		-13.510	5.244	20

To determine the magnitude of this effect, a normalized N-gain test was conducted to measure the improvement in students' communicative competence before and after learning with gamification. The calculation using SPSS produced a g-value of 0.47. According to the criteria, a g-value between 0.30 and 0.70 falls into the "moderate" category, indicating that the improvement in communicative competence after the intervention is classified as moderate.

Based on these findings, it can be concluded that the use of gamification in the English subject has a substantial and statistically significant effect on the communicative competence of tenth-grade students at SMAN 01 Padang Ratu in the Academic Year 2024/2025. The results suggest that gamified learning strategies can effectively enhance students' communication skills, with a moderate level of improvement observed after the intervention.

Discussion

Gamification has emerged as a transformative approach in English language education, particularly in enhancing communicative competence among learners (Laiya, 2025; Rezi, Noor, & Tsai, 2024; Abdelhamid et al., 2023). By integrating game elements such as points, badges, leaderboards, and challenges into the learning process, gamification fosters an engaging and motivating environment that encourages active participation and sustained interest in language learning. This approach not only makes learning more enjoyable but also addresses affective factors, such as reducing anxiety and increasing self-confidence among students (Almelhes, 2024; Anisah, 2024).

Research indicates that gamified learning environments can lead to significant improvements in various aspects of communicative competence, including fluency, accuracy, and interaction skills (Ghofur et al., 2023; Tuki, Zailani, & Asbulah, 2025). Gamified activities provide contextualized opportunities for practice through interactive tasks, such as role-plays and simulations, which help students develop strategic

competence—the ability to use communication strategies effectively to overcome difficulties and enhance interaction (Kharizmi et al., 2024).

The effectiveness of gamification in English language learning is supported by empirical studies. Zhang and Hasim (2023) found that gamified EFL/ESL instruction improved learner engagement, motivation, and language proficiency. Similarly, Al-Khresheh (2025) demonstrated that gamification significantly enhanced vocabulary, speaking, and listening skills while also boosting learner motivation. These findings complement previous studies in Arabic language learning, which also report that gamification positively affects motivation and achievement (Abu Inein, 2024; Al Mufleh & Abu Inein, 2025).

In the context of Indonesian education, a study conducted at SMAN 01 Padang Ratu in the 2024/2025 academic year demonstrated that gamification had a positive effect on tenth-grade students' communicative competence in English (Laiya, 2025; Rezi, Noor, & Tsai, 2024). A pretest–posttest design revealed a significant improvement in students' performance after gamified learning, with a normalized N-gain value of 0.47, indicating a moderate increase in communicative competence. This aligns with prior research suggesting that gamification motivates students and makes learning more interactive and enjoyable (Anisah, 2024; Ghofur et al., 2023).

Gamification aligns with contemporary educational theories, such as Self-Determination Theory and Flow Theory, which emphasize autonomy, competence, and relatedness as drivers of intrinsic motivation (Hamari et al., 2014; Sailer et al., 2017; Domínguez et al., 2013). By incorporating elements that satisfy these psychological needs, gamified learning environments can facilitate deeper engagement and more effective language acquisition. Moreover, the interactive and playful nature of gamification creates a low-stress learning atmosphere, helping students overcome anxiety associated with language learning (Dicheva et al., 2015).

In conclusion, gamification is a promising pedagogical approach for enhancing communicative competence in English language learning. Its ability to increase motivation, reduce anxiety, and provide interactive, enjoyable learning experiences makes it a valuable instructional tool. Educators should thoughtfully design gamified activities aligned with learning objectives and student needs to maximize their effectiveness (Laiya, 2025; Rezi, Noor, & Tsai, 2024; Hamari et al., 2014).

CONCLUSIONS

The results of the study showed a clear improvement in students' communicative competence, supporting the view that gamification in the English subject has a positive effect on language learning among tenth-grade students at SMAN 01 Padang Ratu in the Academic Year 2024/2025. This suggests that incorporating gamified elements into lessons can effectively enhance students' engagement, motivation, and communication skills in English. Therefore, it is recommended that educators integrate gamification into the English learning curriculum to create more effective and engaging learning experiences. Activities such as point systems, role-plays, and interactive quizzes can

encourage active participation and help students practice their language skills in meaningful ways.

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