

**THE EFFECT OF USING GAMIFICATION ON STUDENTS' MOTIVATION IN
ENGLISH LEARNING AMONG THE TENTH GRADE STUDENTS OF SMKS
TEKNOLOGI MUHAMMADIYAH BUKITTINGGI**

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ABSTRACT

This research was conducted due to several problems found in the English learning process among tenth-grade students at SMKS Teknologi Muhammadiyah Bukittinggi. Some students showed low motivation in learning English, as indicated by their limited participation, lack of enthusiasm, and difficulties in understanding English learning materials. Therefore, this study aimed to examine the effect of gamification on students' motivation in learning English. This research employed a quantitative approach using a quasi-experimental design involving an experimental class and a control class. The experimental class received English instruction through gamification-based learning, while the control class was taught using conventional learning methods. The sample was selected through purposive sampling. Data were collected using a closed-ended questionnaire with a five-point Likert scale to measure students' motivation in learning English. The data were then analyzed statistically to determine whether there was a significant difference in students' motivation between the two groups. The findings revealed that the use of gamification did not have a statistically significant effect on students' motivation in learning English. There was no significant difference in motivation between students who were taught through gamification and those who received conventional instruction. However, during the learning process, students in the experimental class demonstrated more consistent participation, attention, and engagement in classroom activities. These findings indicate that although gamification did not significantly improve students' motivation based on the statistical results, it contributed positively to students' classroom engagement and participation. Therefore, gamification may still be considered a useful instructional strategy for creating a more active and engaging English learning environment.

Keywords: Gamification, Motivation and English Learning.

A. Introduction

In this digital era, English has become a very important language. It is used in several areas, including education, technology, and business.

As a global language, English is important for vocational school students to prepare for future job competition. According to a study by SCIRP (2021), English proficiency is

one of the essential factors in enhancing the employability of vocational school graduates. Despite its importance, many students struggle to learn English due to a lack of motivation, which affects their English language skills.

Motivation is one of the key factors in the language learning process. Based on Harmer (1991), motivation has an important role in improving students' performance in the teaching and learning process. It encourages students to work harder to achieve better results. Conversely, a lack of motivation can negatively influence academic performance, as students may have difficulty understanding the material and become less engaged in learning activities (Mauliya et al., 2020).

Based on preliminary research conducted by the researcher at SMKS Teknologi Muhammadiyah Bukittinggi, it was found that some students still showed low motivation in learning English. This could be seen from their lack of focus during lessons, which made it harder for them to understand

and follow the material. Some students appeared disengaged, frequently used their phones, seemed drowsy, or preferred chatting with friends rather than paying attention to the teacher. These behaviors indicated a lack of seriousness in the learning process and could negatively affect their academic performance.

Based on these challenges, there is a need for more varied and engaging learning methods to enhance students' learning experiences. One approach is the integration of technology, such as educational games, which can capture students' attention and make learning more interactive and enjoyable. The implementation of games in educational activities has been proven to enhance students' motivation and encourage them to participate more actively in classroom activities (Schunk et al., 2012; Icard, 2014). However, gamification is not intended to replace educational content with games but to incorporate game-based elements and mechanics into learning activities to support and enhance the

effectiveness of the learning process (Mee Mee et al., 2020).

Gamification is the use of game-based elements, such as points, badges, rewards, challenges, and leaderboards, to engage learners and improve learning outcomes (Kapp, 2012; Anisa et al., 2020). Several studies have shown that gamification is able to improve motivation, engagement, and performance in English language learning (Purgina et al., 2019; Wichadee & Pattanapichet, 2018; Lin et al., 2018; Zarzycka-Piskorz, 2016).

Based on interviews conducted with tenth-grade English teachers and students on February 11, 2025, it was found that the school had implemented a student-centered learning model aligned with the Merdeka Curriculum. Teachers had also used quizzes and occasionally implemented games during the teaching and learning process. However, some students stated that they still had difficulty understanding English material and expected more diverse and interactive teaching

methods to make learning more interesting and less monotonous.

Classroom observations conducted on the same date also showed that although quizzes were used, the overall teaching process remained largely teacher-centered. As a result, many students appeared bored, lost focus, and had difficulty understanding the material presented. Therefore, more interactive learning strategies are needed to create a more engaging learning environment and maintain students' motivation.

Considering the potential of gamification to increase students' motivation and engagement in learning, it is important to implement this learning model in English classrooms. Therefore, the researcher is interested in conducting a study entitled "The Effect of Gamification on Students' Motivation in English Learning Among Tenth Grade Students of SMKS Teknologi Muhammadiyah Bukittinggi."

B. Research Method

This study employed a quantitative approach with a quasi-experimental design involving an experimental group and a control group. The population consisted of 147 tenth-grade students of SMKS Teknologi Muhammadiyah Bukittinggi in the 2024/2025 academic year. Purposive sampling was used to select X TSM 1 as the experimental group and X TSM 2 as the control group, with 31 students in each group. The experimental group received gamification-based English instruction, while the control group received conventional instruction.

Data were collected using a 36-item motivation questionnaire adapted from Keller's (1987) Instructional Materials Motivation Survey (IMMS), administered as a pre-test and post-test. The questionnaire demonstrated moderate content validity based on Aiken's V (0.53) and good reliability with a Cronbach's Alpha coefficient of 0.863.

The data were analyzed using SPSS version 27. Normality and

homogeneity tests were conducted as prerequisite tests. As the data did not meet the normality assumption, the Mann-Whitney U test was employed to determine the difference in students' motivation scores between the experimental and control groups.

C. Findings and Discussion

The findings of this study are presented to answer the research questions concerning the effect of gamification on students' motivation in learning English, the difference between students who received gamification-based instruction and those who received conventional instruction, and whether students taught through gamification demonstrated better motivation than those taught through conventional instruction. The study was conducted over five meetings from May 19 to May 31, 2025. After the data collection process, 23 students from the experimental group and 21 students from the control group were included in the final analysis. The experimental group received English instruction using gamification-based learning

activities, while the control group received conventional instruction.

Table 1. Descriptive Statistics of Students' Motivation Scores

Group	N	Pre-test Mean	Post-test Mean	Mean Gain
Experimental	23	108.52	105.39	-3.13
Control	21	98.62	102.14	3.52

Table 1 shows that the experimental group obtained a mean pre-test score of 108.52 and a mean post-test score of 105.39, resulting in a decrease of 3.13 points. Meanwhile, the control group showed an increase from a mean pre-test score of 98.62 to a post-test score of 102.14, with a gain of 3.52 points. Although the experimental group obtained a higher post-test mean than the control group, the descriptive results did not indicate an improvement in motivation following the gamification treatment. Therefore, further statistical analysis was conducted to determine whether the difference between the two groups was statistically significant.

Before hypothesis testing, normality and homogeneity tests were conducted using SPSS version 27. The normality test showed that the pre-test and post-test scores of the experimental group and the pre-test scores of the control group were normally distributed. However, the post-test scores of the control group were not normally distributed, with a significance value of 0.039 (< 0.05). The homogeneity test also showed that the data were not homogeneous, with a significance value of 0.000 (< 0.05). Since the assumptions for parametric testing were not fully satisfied, the Mann-Whitney U test was used to compare the motivation scores between the experimental and control groups.

Table 2. Mann-Whitney U Test of Students' Motivation

Test	Mann-Whitney U	Z	Sig. (2-tailed)	Decision
Post-test	163.000	-1.847	0.065	Not significant

Table 2 shows that the Mann-Whitney U test produced a significance value of 0.065, which was

greater than 0.05. Therefore, there was no statistically significant difference in students' motivation between the experimental and control groups. The experimental group obtained a mean rank of 19.09, while the control group obtained a higher mean rank of 26.24. However, because the significance value was greater than 0.05, the difference was not statistically significant. Thus, the findings indicate that gamification did not significantly improve students' motivation compared to conventional instruction.

The absence of a significant effect may be explained by several factors. First, the treatment was conducted over a relatively short period, which may not have provided sufficient time for students to adapt to and benefit from the gamified learning environment. Second, the relatively small number of participants may have limited the statistical power of the study. Third, limited technological support prevented some gamification features from being implemented optimally. These factors may have

reduced the potential impact of gamification on students' motivation.

This finding differs from previous studies that reported positive effects of technology-based gamification. Syafitri et al. (2023) found that the use of Kahoot increased students' motivation, activity, and enthusiasm in English learning. Similarly, Efendi and Sesmiarni (2022) reported that the use of Quizizz supported students' understanding and encouraged them to achieve higher scores. These studies suggest that technological support can play an important role in creating an interactive gamified learning environment. The difference between those findings and the present study may be related to the availability of technology, treatment duration, the type of gamification platform, and the learning context.

Although gamification did not produce a statistically significant improvement in motivation, students in the experimental group showed active participation during the learning process. This suggests that

gamification may contribute to classroom engagement even when its effect on motivation is not statistically significant. Therefore, gamification can still be considered a complementary teaching strategy to create a more interactive and participatory English learning environment. Future research may involve larger samples, longer treatment periods, and better technological support to further examine the potential of gamification in enhancing students' motivation and engagement in English learning.

D. Conclusion

Based on the findings and discussion, this study concludes that the use of gamification did not have a statistically significant effect on students' motivation in learning English at the tenth grade of SMKS Teknologi Muhammadiyah Bukittinggi. The results of the Mann-Whitney U test showed that there was no significant difference in motivation between students who received gamification-based instruction and those who received conventional

instruction. This finding indicates that, under the conditions of this study, gamification was not sufficient to produce a significant improvement in students' motivation.

Several factors, such as the relatively short treatment duration, limited number of participants, and technological limitations, may have influenced the effectiveness of the gamification implementation. Nevertheless, the use of gamification provided a more interactive learning atmosphere and encouraged students to participate more actively in classroom activities. Thus, although gamification did not significantly improve students' motivation, it may still be considered a complementary instructional strategy for creating more engaging and participatory English learning. Future studies are recommended to involve larger samples, longer treatment periods, and more comprehensive technological support to further examine the potential of gamification in English language learning.

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