The Effectiveness of Gamification With Kahoot on English Language Vocabulary Mastery

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ABSTRACT

Vocabulary is one of the fundamental aspects of English learning and plays a crucial role in supporting students' ability to communicate effectively. However, many students still face challenges in mastering vocabulary, especially when learning relies only on conventional methods. Gamification, such as the use of Kahoot, provides an alternative strategy that combines learning with interactive and engaging activities. This study aimed to investigate the effectiveness of gamification with Kahoot on the vocabulary mastery of sixth-grade students at SDN 06 Sungai Rumbai. A quantitative approach was applied using a one-group pretest-posttest design with 29 participants. The treatment was conducted through interactive classroom sessions where students practiced vocabulary using Kahoot games. The research instrument consisted of 50 multiple-choice items, of which 24 were validated and used in the pretest and posttest. Results showed an increase in average scores from the pretest to the posttest, with a significance value of less than 0.05, indicating a significant effect. It can be concluded that the use of Kahoot as a gamified learning platform effectively improves students' vocabulary mastery and can serve as an innovative medium in English language teaching, particularly for young learners.

Keywords: English learning, Gamification, Kahoot, vocabulary mastery

INTRODUCTION

English is an international language that plays an essential role in education, technology, and global communication. At the elementary school level, vocabulary is the foundation for developing the four language skills: listening, speaking, reading, and writing. Without sufficient vocabulary, students cannot communicate effectively in English.

Preliminary observation at SDN 06 Sungai Rumbai revealed that sixth-grade students still face difficulties in vocabulary mastery. The learning process tends to be monotonous, as teachers mostly rely on conventional methods such as lecturing and textbook exercises. Consequently, students feel bored, less engaged, and struggle to remember and apply new vocabulary. This situation reflects an urgent empirical problem that requires more innovative and interactive teaching strategies.

Recent studies have emphasized the effectiveness of digital-based learning in improving student motivation and achievement. Wang and Tahir (2020), in their literature review, concluded that gamification with Kahoot increases students' engagement, motivation, and comprehension across different learning contexts.

Afini et al. (2023) found that Kahoot significantly improved vocabulary achievement among junior high school students. Similarly, Rohimajaya and Munawaroh (2023) reported that Kahoot enhanced vocabulary mastery by creating an enjoyable classroom atmosphere. Moreover, Nazmi et al. (2024) confirmed that the integration of Kahoot improved students' reading achievement through interactive activities. These findings suggest that Kahoot is an effective learning tool. However, most of the studies have been conducted at the secondary or higher education levels, while limited research has explored its implementation in elementary schools.

Although previous research has proven the benefits of Kahoot in language learning, it has mainly focused on junior and senior high school or university students. Studies at the elementary level, especially in English vocabulary mastery, are still scarce. In fact, elementary school students are in a crucial stage of language acquisition and need interactive as well as enjoyable learning media. This indicates a gap in both empirical practice and theoretical development regarding the use of Kahoot in vocabulary learning for young learners.

Based on the gap identified, this study addresses the question: Does gamification with Kahoot effectively improve the vocabulary mastery of sixth-grade students at SDN 06 Sungai Rumbai? The objective of this study is to examine the effectiveness of Kahoot in supporting vocabulary learning among elementary students. The novelty lies in applying Kahoot as a gamification platform at the elementary school level, an area that has not been widely explored in previous studies.

METHOD

This study employed a quantitative approach with a pre-experimental design. The design used was a one-group pretest-posttest, in which students were given a pretest before treatment and a posttest after treatment. This design allowed the researcher to measure the difference in students' vocabulary mastery before and after being taught through Kahoot.

The research was conducted at SDN 06 Sungai Rumbai in the even semester of the 2025 academic year. The population of this study consisted of all sixth-grade students, totaling 29 learners, and the researcher used total sampling. Therefore, all students in the class were involved as the research sample.

The data were collected through a vocabulary test. Initially, the researcher prepared 50 multiple-choice items related to daily activities at school and at home. After validation by experts, 24 items were declared valid and used for both the pretest and the posttest. These tests were designed to measure students' vocabulary mastery accurately. During the treatment, students were engaged in gamification activities using the Kahoot platform. The activities required students to answer vocabulary-based questions interactively in a competitive and enjoyable classroom environment.

The data analysis was conducted using statistical procedures. First, the researcher compared the pretest and posttest scores to observe improvements. Then, a paired sample t-test was employed with the help of SPSS software to determine whether the difference between pretest and posttest scores was statistically significant. The decision was based on a significance level of 0.05.

RESULT AND DISCUSSION

The results of this study were obtained from the pretest and posttest administered to 29 sixth-grade students at SDN 06 Sungai Rumbai. The tests consisted of 24 validated multiple-choice items on vocabulary related to daily activities.

The descriptive statistics showed that the students' average score in the pretest was **33.8**, indicating that their initial vocabulary mastery was still low. After the treatment using Kahoot, the average score increased to **47.9** in the posttest. This suggests that the students experienced significant improvement in vocabulary mastery after participating in gamified learning activities.

The statistical analysis using the paired sample t-test further confirmed this improvement. The significance value obtained was **0.000 < 0.05**, which means there was a statistically significant difference between the pretest and posttest results. Therefore, the null hypothesis (Ho) was rejected, and the alternative hypothesis (Ha) was accepted, indicating that gamification with Kahoot had a positive and significant effect on students' vocabulary mastery.

Table 1. Comparison of Pretest and Posttest Results

Test	N	Mean	Sig. (2-tailed)
Pretest	29	33.8	
Posttest	29	47.9	0.000

Discussion

The findings of this study show that the use of Kahoot as a gamification tool significantly improved the vocabulary mastery of sixth-grade students. Before the treatment, students' vocabulary knowledge was limited, as shown by the low pretest scores. However, after the learning sessions with Kahoot, their scores improved considerably.

This result is consistent with previous studies that also demonstrated the effectiveness of Kahoot in language learning. Wang & Tahir (2020) found that Kahoot increases engagement and motivation, while Afini et al. (2023) and Rohimajaya & Munawaroh (2023) confirmed that Kahoot significantly enhances vocabulary mastery. Similarly, Nazmi et al. (2024) revealed that Kahoot improved reading comprehension and vocabulary knowledge.

The improvement can be attributed to several factors. First, Kahoot provided an interactive and enjoyable learning environment, which motivated students to actively participate in class activities. Second, the competitive element in Kahoot encouraged students to focus and try their best in answering the questions. Finally, the immediate feedback feature allowed students to recognize their mistakes and learn the correct vocabulary in real time.

Thus, the findings imply that gamification using Kahoot is an effective method for improving vocabulary mastery, especially among elementary school students. Compared to conventional methods, this approach offers a more engaging learning experience that meets the needs of young learners.

CONCLUSION

This study concluded that gamification with Kahoot significantly improved the English vocabulary mastery of sixth-grade students at SDN 06 Sungai Rumbai. The findings revealed a statistically significant difference between pretest and posttest results, with students' average scores increasing after treatment. The improvement can be attributed to the interactive, engaging, and competitive nature of Kahoot, which motivated students to actively participate and provided immediate feedback for better learning.

However, this study had limitations, particularly in terms of scope and duration. The research was conducted only in one elementary school with a limited sample of 29 students, and the treatment sessions were relatively short. Therefore, caution should be exercised in generalizing the findings to wider populations or different educational contexts.

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