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The Use Of Kahoot In Improving Students' Vocabulary Mastery At SMP Negeri 4 Pituriase

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A R T I C L E I N F O

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A B S T R A C T

Vocabulary mastery is a fundamental component of English language learning because it supports students' ability to understand and use the language effectively. However, students often face difficulties in learning vocabulary due to limited learning media and low classroom engagement. This study aimed to examine the effectiveness of Kahoot in improving students' vocabulary mastery and to explore students' responses toward the use of Kahoot as a digital learning medium. This research employed a mixed-method approach with a one-group pre-test and post-test design. The participants were 13 seventh-grade students of SMP Negeri 4 Pituriase selected through purposive sampling. The data were collected through vocabulary tests, interviews, and documentation. Quantitative data were analyzed using a paired sample t-test with IBM SPSS Statistics 25, while qualitative data were analyzed through data reduction, data display, and conclusion drawing. The results showed that students' mean score increased from 66.69 in the pre-test to 90.62 in the post-test. The paired sample t-test showed a significance value of 0.000, which was lower than 0.05, indicating a significant improvement in students' vocabulary mastery after the implementation of Kahoot. The interview results also revealed that students responded positively to Kahoot, as it increased their motivation, participation, interest, and understanding during the learning process. These findings suggest that Kahoot is an effective digital learning medium for enhancing vocabulary mastery among junior high school students. Therefore, Kahoot can be recommended as an interactive and engaging tool for English vocabulary instruction.

INTRODUCTION

Vocabulary mastery plays a crucial role in English language learning because it supports learners' ability to understand, produce, and use language effectively in both spoken and written communication. For junior high school students, vocabulary knowledge becomes a fundamental foundation for developing other language skills, including reading, writing, listening, and speaking. However, vocabulary learning is often considered difficult and monotonous by students, particularly when the learning process relies heavily on memorization and conventional teaching methods.

In the context of 21st-century education, the integration of digital technology into classroom instruction has become increasingly important. Students today are highly familiar with digital devices, and this condition requires teachers to design learning activities that are more interactive, engaging, and relevant to students' learning characteristics. Nevertheless, preliminary observations at SMP Negeri 4 Pituriase showed that English learning activities were still mostly conducted through conventional media, while the use of digital learning tools remained limited. This situation created a gap between students' familiarity with technology and the instructional methods applied in the classroom.

One digital learning medium that can be used to address this issue is Kahoot. Kahoot is a game-based learning platform that enables teachers to create interactive quizzes and allows students to participate in real time using digital devices. Through features such as immediate feedback, scoring, time limits, and leaderboards, Kahoot creates a competitive and enjoyable learning atmosphere. These gamification elements may increase students' motivation, participation, and attention during the learning process. In vocabulary instruction, Kahoot also provides repeated exposure to words, which can help students recognize, understand, and retain vocabulary more effectively.

Previous studies have shown that Kahoot can improve students' engagement, motivation, and learning outcomes. However, many studies have mainly focused on the use of Kahoot as an assessment tool rather than as an integrated medium in the vocabulary learning process. Therefore, this study offers a different perspective by implementing Kahoot not only for evaluation but also as a learning medium for introducing, practicing, and reinforcing English vocabulary among junior high school students.

Based on the above considerations, this study aimed to investigate the effectiveness of Kahoot in improving students' vocabulary mastery at SMP Negeri 4 Pituriase. In addition, this study also explored the obstacles faced by students in using digital-based learning media during the English learning process. The findings of this study are expected to contribute to the development of interactive digital learning practices, particularly in English vocabulary instruction at the junior high school level.

LITERATURE REVIEW

Digital Learning and Gamification in English Language Teaching

The development of digital technology has significantly transformed teaching and learning practices, including English language instruction. In the 21st-century learning context, digital media are increasingly used to create more interactive, flexible, and student-centered learning environments. Digital learning enables students to access materials, participate in learning activities, and receive feedback through technological devices. This approach is particularly relevant for junior high school students, who are generally familiar with smartphones and digital applications in their daily lives.

One important concept in digital learning is gamification. Gamification refers to the integration of game elements, such as points, scores, time limits, rewards, and leaderboards, into non-game learning contexts. In education, gamification is used to increase students' motivation, participation, and engagement. Through gamified activities, students are encouraged to become more active in the learning process because the classroom atmosphere becomes more enjoyable and competitive. In vocabulary learning, gamification can support repeated practice and immediate feedback, both of which are important for vocabulary retention.

Kahoot as a Game-Based Learning Medium

Kahoot is one of the digital learning platforms that applies gamification principles in classroom instruction. It allows teachers to design interactive quizzes that can be accessed by students through digital devices such as smartphones, tablets, or laptops. The platform provides real-time responses, scores, time-based questions, and leaderboards, which create a competitive and engaging learning environment. In the thesis, Kahoot is described as a game-based learning platform that combines digital learning and gamification through competition, instant feedback, time pressure, and rewards.

In English language teaching, Kahoot can be used not only as an assessment tool but also as a learning medium. Its quiz-based format allows students to repeatedly encounter vocabulary items in an interactive way. This repeated exposure helps students recognize, recall, and understand vocabulary more effectively. Moreover, Kahoot can increase students' classroom participation because students are directly involved in answering questions and receiving immediate feedback. The thesis also explains that Kahoot supports vocabulary learning through interactive and repetitive practice, making it useful for both learning and assessment activities.

Vocabulary Mastery in English Learning

Vocabulary mastery is a fundamental component of English language learning. It refers to students' ability to recognize, understand, and use words appropriately in different contexts. Vocabulary knowledge supports the development of other language skills, including reading, writing, listening, and speaking. Without sufficient vocabulary, students may find it difficult to understand texts, express ideas, and communicate effectively.

Vocabulary learning requires more than memorizing word meanings. Students need repeated exposure, contextual practice, and active involvement in the learning process. Interactive learning media such as Kahoot can help students learn vocabulary more meaningfully by presenting words through questions, answer choices, feedback, and classroom interaction. The thesis emphasizes that vocabulary mastery plays an important role in helping students understand written texts, express ideas, and participate in communication.

Previous Studies on Kahoot and Vocabulary Learning

Several previous studies have shown that Kahoot can improve students' motivation, engagement, and learning outcomes. Research by Wang and Tahir (2020), Licorish et al. (2018), and Plump and LaRosa (2017) indicated that Kahoot creates a more active and participatory classroom environment compared to traditional learning methods. In vocabulary instruction, Kahoot provides immediate feedback and repeated practice, which support students' retention and understanding of new words.

Previous related studies discussed in the thesis also reported positive effects of Kahoot on students' vocabulary mastery. For example, studies by Ratih, Nabila, and Aslama found that students' vocabulary achievement improved after the implementation of Kahoot-based learning activities. These studies suggest that the interactive and competitive features of Kahoot can help students become more motivated and engaged in learning vocabulary. However, some previous studies mainly focused on Kahoot as a formative assessment tool rather than as an integrated learning medium.

Research Gap

Although previous studies have demonstrated the benefits of Kahoot in English learning, there is still a need for further investigation into its use as an integrated vocabulary learning medium, especially at the junior high school level. Many studies have used Kahoot mainly for evaluation, while fewer studies have examined its use throughout the vocabulary learning process, including introduction, practice, reinforcement, and evaluation. The novelty of this study lies in the implementation of Kahoot as a digital learning medium specifically designed to improve junior high school students' vocabulary mastery, rather than merely as an assessment tool.

Therefore, this study is positioned to fill this gap by investigating the effectiveness of Kahoot in improving students' vocabulary mastery at SMP Negeri 4 Pituriase. In addition, this study also explores students' obstacles in using digital-based learning media, such as internet connection problems and limitations in learning activities. By combining learning outcomes and students' experiences, this study provides a more comprehensive understanding of Kahoot as an interactive digital medium for English vocabulary instruction.

METHOD

Research Design

This study employed a mixed-method approach by combining quantitative and qualitative data to obtain a comprehensive understanding of the use of Kahoot in improving students' vocabulary mastery. The quantitative data were used to measure students' vocabulary achievement before and after the treatment, while the qualitative data were used to explore students' responses and obstacles in using Kahoot as a digital learning medium.

The research applied a pre-experimental design with a one-group pre-test and post-test model. In this design, the participants were given a pre-test before the implementation of Kahoot, followed by treatment using Kahoot-based vocabulary learning activities, and then a post-test after the treatment. This design was considered appropriate because the study focused on identifying the improvement in students' vocabulary mastery after the use of Kahoot.

Participants

The population of this study consisted of 130 seventh-grade students of SMP Negeri 4 Pituriase. The sample involved 13 students selected through purposive sampling. The selected class was chosen based on accessibility, classroom participation, and students' basic ability to use digital learning media. All participants were involved in both the pre-test and post-test, while selected students were also involved in the interview process to provide qualitative data.

Research Instruments

The instruments used in this study were vocabulary tests, interviews, and documentation. The vocabulary test was used to measure students' vocabulary mastery before and after the treatment. The test was administered in two stages: the pre-test and the post-test. The items consisted of vocabulary questions designed to assess students' ability to recognize and understand English vocabulary.

The interview was used to collect qualitative data regarding students' experiences, perceptions, and obstacles in using Kahoot during the learning process. Documentation was used as supporting data, including students' test results and learning activity records.

Research Procedure

The research procedure consisted of four main stages. First, the pre-test was administered to identify students' initial vocabulary mastery before the treatment. Second, the treatment was conducted by using Kahoot as a digital learning medium. During this stage, students participated in interactive vocabulary quizzes through Kahoot, received immediate feedback, and engaged in repeated vocabulary practice. The learning activities focused on helping students understand and remember vocabulary through an enjoyable and competitive classroom atmosphere.

Third, the post-test was administered after the treatment to measure students' vocabulary improvement. The post-test had a similar level of difficulty to the pre-test in order to obtain a fair comparison of students' achievement before and after using Kahoot. Finally, interviews were conducted to obtain students' responses and identify the obstacles they faced while using digital-based learning media.

Data Analysis

The quantitative data were analyzed using a paired sample t-test through IBM SPSS Statistics 25. This analysis was used to determine whether there was a significant difference between students' pre-test and post-test scores. The significance level was set at 0.05. If the significance value was lower than 0.05, it indicated that the use of Kahoot had a significant effect on students' vocabulary mastery.

Meanwhile, the qualitative data obtained from interviews were analyzed through data reduction, data display, and conclusion drawing. The qualitative findings were used to support the quantitative results by explaining students' responses, motivation, participation, and obstacles during the implementation of Kahoot.

RESULT AND DISCUSSION

The results of this study were obtained from vocabulary tests, statistical analysis, semi-structured interviews, and documentation. The quantitative data were collected through pre-test and post-test scores, while the qualitative data were obtained from students' responses after the implementation of Kahoot as a digital learning medium.

The pre-test results showed that students' initial vocabulary mastery was still relatively low to moderate. Out of 13 students, 4 students were categorized as "Very Poor," 5

students as “Poor,” 2 students as “Good,” and 2 students as “Excellent.” No student was categorized as “Fair.” The highest pre-test score was 93, while the lowest score was 47, with a mean score of 67.

The distribution of the pre-test scores indicated that most students still had difficulties in understanding English vocabulary. Most scores were concentrated between 53 and 67, showing that students’ vocabulary mastery before the treatment was uneven and still needed improvement. This result became the baseline for measuring students’ progress after the implementation of Kahoot.

After the treatment using Kahoot, the post-test results showed a clear improvement in students’ vocabulary mastery. Out of 13 students, 9 students were categorized as “Excellent,” while 4 students were categorized as “Good.” There were no students in the “Fair,” “Poor,” or “Very Poor” categories. The highest post-test score reached 100, while the lowest score was 80.

The mean score also increased substantially from 66.69 in the pre-test to 90.62 in the post-test. In addition, the standard deviation decreased from 14.60 to 6.87, indicating that students’ scores became more consistent after the treatment. This means that the improvement was not only achieved by a few students but was experienced by most participants.

The paired sample correlation showed a correlation coefficient of 0.284 with a significance value of 0.384. This result indicated a weak and statistically insignificant relationship between the pre-test and post-test scores. Therefore, students’ initial vocabulary ability did not strongly determine their final achievement after using Kahoot.

The paired sample t-test showed a significance value of 0.000, which was lower than 0.05. This result indicated that there was a statistically significant difference between students’ vocabulary scores before and after the treatment. Therefore, the null hypothesis was rejected and the alternative hypothesis was accepted, meaning that Kahoot significantly improved students’ vocabulary mastery.

The interview results supported the quantitative findings. Most students stated that Kahoot made vocabulary learning more enjoyable, interesting, and easier to understand. Students also reported that they learned many new words and became more capable of understanding vocabulary concepts such as synonyms and antonyms. However, several students mentioned challenges such as unstable internet connection and limited question variation.

DISCUSSION

The findings indicate that Kahoot had a positive effect on students’ vocabulary mastery. The significant increase in students’ mean score from 66.69 to 90.62 shows that the use

of Kahoot helped students improve their ability to recognize, understand, and remember English vocabulary. This improvement suggests that interactive digital media can support vocabulary learning more effectively than conventional classroom activities.

Before the treatment, many students were still categorized in the lower achievement levels. The pre-test results showed that several students had difficulty understanding word meanings and recognizing vocabulary concepts. This condition reflects the common problem in vocabulary learning, where students often struggle when learning is dominated by memorization or textbook-based instruction.

After the implementation of Kahoot, students' vocabulary achievement improved significantly. The absence of students in the "Poor" and "Very Poor" categories in the post-test indicates that Kahoot helped reduce students' vocabulary difficulties. The post-test results also show that students became more confident and capable of answering vocabulary questions correctly after repeated practice through Kahoot.

The decrease in standard deviation from 14.60 to 6.87 is also important. It shows that the gap between higher-achieving and lower-achieving students became smaller after the treatment. This means that Kahoot did not only benefit students who already had good vocabulary mastery but also helped students with lower initial ability improve their performance.

The significance value of 0.000 from the paired sample t-test confirms that the improvement was statistically significant. Since the value was lower than 0.05, the use of Kahoot can be considered effective in improving students' vocabulary mastery. This result supports the idea that game-based learning can create a more active, motivating, and meaningful learning experience for students.

The qualitative findings further explain why Kahoot improved students' vocabulary mastery. Students stated that Kahoot was enjoyable, interesting, and easier to use than conventional learning media. The features of Kahoot, such as multiple-choice questions, instant feedback, scores, and competition, encouraged students to participate actively and pay more attention during the learning process.

Kahoot also supported vocabulary understanding through repeated exposure and immediate reinforcement. Students were not only asked to answer questions but also received explanations after each item. This process helped them understand the meaning of words, recognize new vocabulary, and differentiate vocabulary concepts such as synonyms and antonyms. Therefore, Kahoot functioned not only as an assessment tool but also as an interactive learning medium.

However, the implementation of Kahoot still had several limitations. Some students experienced problems with unstable internet connection, and others suggested that the questions should be more varied and arranged from easier to more difficult levels.

These challenges indicate that the effectiveness of Kahoot depends not only on the platform itself but also on technical support, teacher preparation, and instructional design. Overall, Kahoot can be recommended as an effective digital learning medium for improving junior high school students' vocabulary mastery.

CONCLUSION

This study concluded that Kahoot was effective in improving students' vocabulary mastery at SMP Negeri 4 Pituriase. The effectiveness was shown by the increase in students' mean score from 66.69 in the pre-test to 90.62 in the post-test. The paired sample t-test also showed a significance value of 0.000, which was lower than 0.05, indicating that the improvement was statistically significant.

The use of Kahoot created a more interactive, enjoyable, and motivating learning atmosphere. Through game-based quizzes, immediate feedback, scoring, and repeated vocabulary practice, students became more active and interested in learning English vocabulary. Kahoot helped students understand word meanings, remember new vocabulary, and improve their participation during the learning process.

The interview results also showed that students gave positive responses toward the use of Kahoot. They considered Kahoot an interesting and helpful digital learning medium. However, several obstacles were found during the implementation, particularly unstable internet connection and the need for more varied question formats. These obstacles indicate that the successful use of Kahoot requires adequate technological support and well-prepared learning materials.

Overall, Kahoot can be recommended as an effective digital learning medium for English vocabulary instruction at the junior high school level. Future researchers are encouraged to involve a larger sample, use a control group, and apply Kahoot in different language skills or learning contexts to obtain broader and more generalizable findings.

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