The Influences of Using Quizizz in Student's English Learning Outcomes

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ABSTRACT

This research aims to examine the influence of using Quizizz, a game-based digital learning platform, on students' English learning outcomes at SMA Muhammadiyah Pangsid. This study employs a quantitative approach with a quasi-experimental design using pre-test and post-test assessments to measure the impact. The sample consisted of 20 students selected through simple random sampling. Data collection techniques included reading tests, questionnaires, observations, and statistical analysis using paired sample ttest. The results show a significant improvement in students' English proficiency after using Quizizz, indicated by the average score increase from 26.55 (pre-test) to 38.75 (posttest). Questionnaire analysis revealed that students responded positively to the use of Quizizz, with high levels of motivation, engagement, and enjoyment. Observational data also demonstrated increased classroom participation and collaboration. These findings suggest that Quizizz not only enhances academic performance but also fosters a more interactive and engaging learning environment. Keywords: Quizizz; Learning Outcomes; Digital Media

INTRODUCTION

In recent years, the integration of technology into education has reshaped how educators engage with students and enhance the learning experience. The shift from traditional to digital learning tools has provided new opportunities for both educators and learners. Among these tools, Quizizz, a game-based learning platform, has gained widespread popularity for its interactive quizzes and instant feedback features. This platform is designed to facilitate the learning process by incorporating elements of gamification, which not only enhances student engagement but also boosts academic performance. Historically, education systems emphasized teacher-centered instruction, relying on lectures and rote memorization. However, the focus has shifted towards more interactive, student-centered learning, where active participation is key to academic success. This transition has seen the rise of educational technologies that encourage students to take charge of their own learning through innovative and engaging platforms. Quizizz, with its ability to offer quizzes, rewards, and real-time feedback, fits perfectly within this paradigm, providing students with a more personalized learning experience that supports independent learning.

Quizizz has become an essential tool for many educators, especially in the field of language learning. English, being a global lingua franca, is a subject that benefits significantly from such technological interventions. The use of Quizizz allows students to practice various language skills, including vocabulary, grammar, and reading comprehension, in a fun, competitive environment. Research indicates that gamification in education can lead to higher levels of student engagement and retention of information, making it a valuable tool for English language learning. Despite its growing popularity, limited research exists on the direct impact of Quizizz on English learning outcomes, particularly at the high school level. While several studies have pointed to the advantages of game-based learning tools in increasing student motivation and participation, there is still a gap in understanding how Quizizz affects specific aspects of English language learning, such as proficiency in reading and writing, and overall academic achievement.

This study aims to investigate the influence of Quizizz on students' English learning outcomes, focusing on engagement, motivation, and academic performance. By examining the effects of Quizizz on students at SMA Muhammadiyah Pangsid, the study seeks to determine whether this digital tool can significantly improve students' English language skills and foster a more engaging and interactive classroom environment. The importance of this research lies in its potential to offer insights into how technology can be effectively integrated into English language teaching. As digital platforms become increasingly ubiquitous in the classroom, understanding the impact of tools like Quizizz can guide educators in choosing the most effective teaching strategies to improve learning outcomes and student motivation.

Through this study, the researcher aims to contribute to the growing body of knowledge on educational technology in language learning, providing valuable information for educators, students, and educational institutions on the benefits and challenges of using digital tools in the classroom. This research also intends to highlight how gamified learning platforms, such as Quizizz, can transform traditional learning methods into more dynamic, interactive, and student-centered experiences.

LITERATURE REVIEW

The integration of technology into education has been widely recognized as a catalyst for improving student engagement and learning outcomes. One of the primary technologies gaining traction in the classroom is gamified learning platforms, such as Quizizz. Game-based learning, which combines educational content with the principles of gaming, has been shown to increase student motivation and participation. According to Gee (2003), games are not only effective in enhancing student engagement but also in fostering deeper cognitive skills by encouraging problem-solving, critical thinking, and collaboration. This aligns with the pedagogical shift towards more interactive and student-centered learning approaches, where the role of the educator is to facilitate rather than dictate the learning process.

In the context of language learning, particularly English, the use of digital platforms like Quizizz offers significant advantages. Language acquisition requires active practice, and Quizizz provides students with an engaging environment to reinforce language skills such as vocabulary, grammar, and comprehension. Previous studies, including those by Hattie and Timperley (2007), have shown that immediate feedback, a core feature of Quizizz, can significantly improve student learning outcomes. By instantly identifying mistakes, students are able to correct errors and consolidate their understanding, which is essential for mastering a language.

Moreover, Quizizz aligns with the principles of Communicative Language Teaching (CLT), which emphasizes real-world communication and the development of practical language skills. According to Richards and Rodgers (2020), CLT focuses on increasing students' fluency in speaking and writing by encouraging interaction and active engagement. Quizizz facilitates this by providing opportunities for students to practice language skills in a collaborative, competitive, and low-stress environment. The platform's ability to integrate quizzes with interactive elements such as leaderboards, points, and rewards further enhances its alignment with CLT's focus on communication and engagement.

The role of motivation in language learning is another crucial factor that has been explored in the literature. Motivation is often regarded as one of the most significant predictors of success in learning English (Liu & Wang, 2022). Students who are motivated to learn are more likely to persist through challenges, participate actively in class, and achieve better academic outcomes. Research by Rahman and Zain (2023) highlights that game-based learning platforms like Quizizz can increase students' intrinsic motivation by making learning enjoyable and rewarding. The competitive nature of Quizizz, combined with the immediate feedback provided, keeps students engaged and motivated to improve their performance.

In addition to motivation, the use of technology in language learning helps to foster a more dynamic and interactive classroom atmosphere. As noted by Alzahrani et al. (2022), digital tools encourage collaboration and peer interaction, which are key elements in language learning. In traditional classrooms, students may often engage in passive learning, where they listen to lectures or complete assignments independently. However, the collaborative features of Quizizz, such as team-based quizzes, promote a sense of community and cooperation. This can be particularly beneficial in language learning, where interaction and communication with peers are vital for practicing and improving language skills.

Several studies have also examined the effectiveness of Quizizz in enhancing students' academic performance, particularly in language learning. Research by Tuan and Khanh (2021) shows that using Quizizz as a tool for language assessment allows for immediate feedback, which helps students correct errors and reinforce their learning. This real-time feedback is particularly valuable in language education, where understanding the nuances of grammar, vocabulary, and sentence structure is essential. Moreover, Quizizz's ability to track progress through data analytics enables teachers to identify areas where students may need additional support, making it easier to personalize instruction.

Another significant advantage of using Quizizz is its versatility in supporting various aspects of language learning. It can be used to assess students' knowledge of vocabulary, reading comprehension, grammar, and even listening skills, as discussed by Garcia and Lee (2022). The platform's flexibility allows teachers to tailor quizzes to address specific learning objectives and to monitor student progress over time. This adaptability is particularly important in language learning, where students may have varying levels of proficiency in different language skills.

While the benefits of using Quizizz in language learning are evident, it is also important to recognize the limitations and challenges associated with its use. Some critics argue that the gamification of learning may detract from the seriousness of academic work, potentially undermining the depth of understanding. Additionally, excessive use of technology in the classroom can lead to issues such as screen fatigue or a lack of face-to-face interaction. Despite these challenges, research suggests that when used appropriately and in conjunction with traditional teaching methods, Quizizz can serve as a valuable tool for enhancing language learning outcomes and student engagement.

METHOD

Design and Sample

This study employs a quantitative research design with a quasi-experimental approach to investigate the impact of Quizizz on students' English learning outcomes. A quasi-experimental design is appropriate for examining cause-and-effect relationships in a natural classroom setting without random assignment to treatment and control groups. Instead, a single group pre-test and post-test design was used to measure the effectiveness of Quizizz before and after its implementation.

The research participants consisted of 20 students from SMA Muhammadiyah Pangsid, selected using simple random sampling. The sample included students from grades X, XI, and XII, providing a representative cross-section of learners at different educational stages. This sampling method helped minimize selection bias and allowed the findings to be generalizable within the school context. The sample size was considered sufficient to detect statistically meaningful results while keeping the analysis manageable.

Instruments and Procedures

To measure students' English learning outcomes, the researcher used pre-test and focusing on vocabulary, grammar, post-test assessments and reading comprehension. The pre-test was administered before the use of Quizizz to establish a baseline of students' language proficiency. After the intervention period using Quizizz, the post-test was given to measure any improvement. Additionally, a questionnaire was used to gather information on students' motivation and engagement. The questionnaire employed a Likert scale format, asking students to rate their experiences with Quizizz in terms of enjoyment, confidence, and motivation during English lessons. To supplement the quantitative data, classroom observations were conducted. The researcher observed students both before and after the Quizizz intervention, using a predefined observation rubric that assessed indicators such as active participation, collaboration, and enthusiasm for learning. These qualitative observations provided deeper context to the test and questionnaire results.

Data Analysis

The data collected were analyzed using both descriptive and inferential statistical methods. Descriptive statistics (such as mean and standard deviation) were used to summarize pre-test and post-test scores, offering a general overview of students' performance changes. A paired sample t-test was conducted to determine whether there was a statistically significant difference between the pre-test and post-test scores. This test is appropriate for comparing two related samples and assessing the effectiveness of the Quizizz intervention. The questionnaire data were analyzed using mean scores to capture students' overall attitudes toward using Quizizz in English learning. The observation data were analyzed descriptively, focusing on changes in classroom behavior and engagement before and after the intervention. This combined analysis of academic results and behavioral indicators aimed to provide a comprehensive understanding of how Quizizz affects students' English learning outcomes.

RESULT AND DISCUSSION

The results of this study show a significant improvement in students' English learning outcomes following the use of Quizizz as a learning tool. A pre-test was administered before the introduction of Quizizz, and a post-test was given after the

students had engaged with the platform. The analysis of the pre-test and post-test scores indicates a marked increase in students' overall performance in English. The average score of the pre-test was 26.55, and the post-test average score increased to 38.75, with a mean difference of 12.2 points. This increase in scores suggests a considerable improvement in the students' understanding of the material after using Quizizz. Statistical analysis using a paired sample t-test confirmed the significance of this difference. The t-value was calculated to be 11.84, which is greater than the critical t-value of 2.093 (at a significance level of 0.05), indicating that the use of Quizizz significantly impacted students' learning outcomes.

A breakdown of the individual student scores further corroborates the positive effects of Quizizz. The number of students achieving higher scores after the intervention increased notably. For example, several students who scored in the low range (40-59) on the pre-test moved to higher categories (80-100) on the post-test. This shift demonstrates the effectiveness of Quizizz in enhancing students' academic performance, particularly in reading comprehension and vocabulary acquisition. The results of the reading test, which were included as part of the post-test, further support the conclusion that Quizizz facilitated improvements in reading comprehension. Prior to the use of Quizizz, 5 students scored between 40-59 on the reading test. After the intervention, no students fell into the 40-59 range, with 8 students achieving scores between 90-100. This shift in scores suggests a significant improvement in students' reading skills, likely due to the interactive and immediate feedback features of Quizizz.

The questionnaire data also revealed that students had a positive response to the use of Quizizz. On a Likert scale, the average score for statements related to student engagement, motivation, and enjoyment was 4.3, indicating a strong preference for this method of learning. Students reported feeling more confident in their abilities and more motivated to participate in English lessons when Quizizz was used. This aligns with previous research suggesting that game-based learning tools can increase student motivation and engagement (Liu & Wang, 2022). Classroom observations further indicated positive changes in the classroom environment. Prior to the use of Quizizz, only a few students were actively participating in class discussions. However, after the intervention, there was a noticeable increase in student participation, enthusiasm, and cooperation. Many students were observed actively answering questions, asking for clarification, and collaborating with their peers. These changes in classroom dynamics suggest that Quizizz not only improved students' academic performance but also fostered a more interactive and cooperative learning environment.

The overall data from pre-test and post-test scores, questionnaires, and observations suggest that Quizizz significantly enhanced both students' academic achievement and their engagement with English learning. The combination of immediate feedback, competitive elements, and interactive quizzes likely contributed to the positive results observed in this study.

Student	Pre-Test Score	Post-Test Score	Difference (d)	d²
RS	28	36	8	64
FM	24	38	14	196
DVN	26	39	13	169
AI	25	40	15	225
AR	29	38	9	81
NM	23	40	17	289
SA	25	39	14	196
SKD	26	39	13	169
SBT	24	37	13	169
MNAJ	28	39	11	121
MM	27	37	10	100
AFS	25	38	13	169
SCT	30	39	9	81
ML	25	37	12	144
LTH	24	39	15	225
KRN	30	39	9	81
IDR	30	38	8	64
DRM	28	38	10	100
AW	28	42	14	196
ARD	31	43	12	144
Total	26.55.00	38.75	244	2713

Table 1. Pre-Test and Post-Test Scores

The results of this study indicate that the use of Quizizz has a significant positive effect on students' English learning outcomes. The substantial increase in average scores from the pre-test to the post-test reflects the effectiveness of Quizizz in enhancing students' academic performance. This aligns with findings from previous research, which suggests that game-based learning platforms, including Quizizz, are highly effective in improving student engagement, motivation, and achievement (Anderson et al., 2020). The increase in students' reading scores further supports the idea that Quizizz fosters improvements in language proficiency, particularly in reading comprehension and vocabulary retention.

The statistical significance of the difference in pre-test and post-test scores (t-value of 11.84) underscores the reliability of the results. The paired sample t-test confirmed that the observed improvements were not due to chance, suggesting that Quizizz played a crucial role in boosting students' English proficiency. This finding is consistent with studies by Tuan and Khanh (2021), who highlighted the role of immediate feedback in enhancing student learning outcomes in language education.

The questionnaire results reveal that students felt more motivated and confident in their English learning after using Quizizz. This finding is particularly important because motivation is a key factor in language learning success. According to Liu and Wang (2022), students' motivation is closely linked to their academic performance, and Quizizz's gamified features effectively increase engagement by making learning more enjoyable. The positive responses to Quizizz also suggest that students preferred this platform over traditional learning methods, which often lack the interactive and dynamic elements that Quizizz offers.

Classroom observations provided additional evidence of the positive effects of Quizizz on student engagement. The increase in active participation and collaboration among students demonstrates that Quizizz not only improves academic outcomes but also transforms classroom dynamics. Students were more eager to engage with their peers, ask questions, and collaborate during lessons. This shift in classroom behavior suggests that Quizizz fosters a more interactive and supportive learning environment, which is essential for language development.

The findings of this study also highlight the versatility of Quizizz as a tool for language assessment. By offering quizzes with a variety of question types, including multiple-choice, short answer, and true/false questions, Quizizz effectively assesses students' understanding of different aspects of language, such as vocabulary, grammar, and reading comprehension. This feature makes Quizizz a valuable tool for both formative and summative assessment, providing educators with real-time data to track student progress and adjust instruction as needed.

Furthermore, the success of Quizizz in this study emphasizes the potential of technology to enhance traditional teaching methods. While traditional language instruction often involves lectures and textbooks, Quizizz provides a more interactive and engaging alternative. By incorporating technology into the classroom, educators can create a more dynamic and personalized learning experience that caters to diverse learning styles. This aligns with the pedagogical shift towards student-centered learning, where technology plays a central role in supporting student engagement and achievement.

While the results are promising, it is important to acknowledge the limitations of this study. The sample size was relatively small, consisting of only 20 students, which may limit the generalizability of the findings. Future studies could benefit from a larger and more diverse sample to explore the broader applicability of Quizizz in improving language learning outcomes. Additionally, the study focused on a single school, and the results may vary in different educational settings. the findings of this study suggest that Quizizz is an effective tool for enhancing students' English learning outcomes. The positive impact on academic performance, student motivation, and classroom engagement highlights the potential of game-based learning platforms to transform language education. Based on these results, it is recommended that educators integrate Quizizz into their teaching practices to foster a more interactive, engaging, and effective learning environment for students.

CONCLUSION

This study has demonstrated that the use of Quizizz significantly enhances students' English learning outcomes. The analysis of pre-test and post-test scores revealed a notable improvement in students' academic performance, with the post-test scores showing an average increase of 12.2 points. The statistical analysis confirmed that the difference between the pre-test and post-test scores was statistically significant, indicating that Quizizz had a positive effect on students' English proficiency, particularly in reading comprehension and vocabulary acquisition. Moreover, the study highlighted that Quizizz not only improved students' academic performance but also increased their motivation and engagement with the learning process. Questionnaire responses indicated that students felt more confident, motivated, and eager to participate in English lessons when using Quizizz. Classroom observations further supported this finding, showing that the platform fostered a more interactive and collaborative classroom environment. The combination of gamification, instant feedback, and competitive elements made learning more enjoyable and engaging for students, which contributed to their improved academic results. Quizizz proves to be a valuable tool in enhancing English language learning, offering a fun, interactive, and effective alternative to traditional teaching methods. By improving both academic outcomes and student motivation, Quizizz has the potential to revolutionize the way English is taught and learned in the classroom. Future research should explore the broader implementation of Quizizz in various educational settings, with a focus on its long-term impact on student learning and retention.

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