Use Of Quizwhizzer Media To Improve Vocabulary Skills In Mathematics Learning

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ABSTRACT

The aim of this research is to determine whether vocabulary abilities in mathematics learning after applying the QuizWhizzer media are better than vocabulary abilities in mathematics learning before applying the QuizWhizzer media. This research is experimental research. The population in this study were class XIII students at Al Mi'raj Talang Middle School. Meanwhile, the sample in this research was class VIII A. The data collection techniques in this research were tests and documentation. The test is used to determine vocabulary abilities in learning mathematics. Documentation is used to find out student data and photos of activities. Data analysis techniques are prerequisite tests: normality and homogeneity tests, data analysis tests: paired sample t test. Vocabulary abilities in mathematics learning after the application of the QuizWhizzer media are better than vocabulary abilities in mathematics learning before the application of the QuizWhizzer media **.**

Keywords: Vocabulary Ability in Mathematics Learning, Quizwhizzer Media.

INTRODUCTION

The ability to understand and master vocabulary in English is an important aspect that supports student success in various subjects, including mathematics. In this era of globalization, the use of English in academic contexts, especially in mathematics learning, is increasingly becoming a necessity. English is not only used as a communication tool, but also as a medium for understanding mathematical concepts presented in literature, learning resources and international exams. Therefore, mastering English vocabulary that is relevant to mathematics becomes increasingly crucial for students.

However, many students experience difficulties in understanding and mastering English vocabulary related to mathematics. This is caused by several factors, including differences in language structure, lack of exposure to mathematical terms in English, and teaching methods that do not fully support mastery of this vocabulary. As a result, students often feel overwhelmed when they have to learn mathematics in English, which

can ultimately affect their understanding of the material and overall learning outcomes.

On the other hand, developments in educational technology provide great opportunities to overcome this challenge. The use of technology in learning allows the creation of a more interactive learning environment and supports students' learning processes in a more interesting and effective way.

The research results of Kibtiah et al. (2024) , Quizwhizzer media is very feasible, practical and effective to use to improve learning outcomes for elementary school students. The kinemaster and quizwhizzer applications increase student learning motivation, many students are active in learning (Iskandar et al., 2023) . The application of QuizWhizzer is effective, meaningful, interesting, and can help the learning process (Wafara, 2023) . Apart from that, the results of other research state that the use of image media is effective in improving English mathematics skills (Qowiyudin et al., 2023) . The learning model through learning games is more fun, increases students'

learning motivation so that their ability to master vocabulary increases (Gusniwati & Rahmawati, 2020) .

One platform that has been widely used for this purpose is QuizWhizzer. QuizWhizzer is a web-based interactive quiz platform designed to increase student engagement in the learning process through a gamification approach. With QuizWhizzer, teachers can design quiz questions that are fun and challenging, and provide immediate feedback that helps students learn more effectively.

In the context of mathematics learning, QuizWhizzer can be used as a medium to improve mastery of English vocabulary relevant to this subject. With a gamification approach, QuizWhizzer makes the process of learning math vocabulary in English more fun and motivating. Students not only learn through memorization, but also through direct interaction with quiz questions that encourage a deep understanding of mathematical terms in English.

Apart from that, using QuizWhizzer also helps students to be more active in learning. The interactions that occur while using this platform, such as answering questions, receiving feedback, and competing with classmates, create a dynamic and competitive learning environment. This can increase students' interest and motivation to learn English vocabulary related to mathematics, which in turn can improve their understanding of the mathematics material itself.

Research regarding the effectiveness of using QuizWhizzer in improving English vocabulary skills in mathematics is important, especially in this increasingly advanced digital era. Technology-oriented education requires innovative approaches to teaching, especially to help students overcome challenges in understanding complex subjects such as mathematics. With this research, it is hoped that empirical evidence can be found that supports the use of QuizWhizzer as an effective learning aid in developing students' English vocabulary skills in a mathematics context.

Furthermore, it is hoped that the results of this research can make a significant contribution to the

development of mathematics teaching strategies that are more appropriate to students' needs in the digital era. The use of media such as QuizWhizzer not only improves mastery of English vocabulary, but can also create a learning environment that is more engaging, fun, and supports the achievement of better learning outcomes.

Overall, by increasing students' ability to master English vocabulary relevant to mathematics, it is hoped that they will be more confident and competent in facing academic and professional challenges in the future. Thus, the use of learning media such as QuizWhizzer can be an effective solution in improving the quality of education in this digital era.

The aim of this research is to determine whether vocabulary abilities in mathematics learning after applying the QuizWhizzer media are better than vocabulary abilities in mathematics learning before applying the QuizWhizzer media.

RESEARCH METHODS

This research is experimental research. The population in this study were class XIII students at Al Mi'raj Talang Middle School. Meanwhile, the sample in this research was class VIII A. The data collection techniques in this research were tests and documentation. The test is used to determine vocabulary abilities in learning mathematics. Documentation is used to find out student data and photos of activities. Data analysis techniques are prerequisite tests: normality and homogeneity tests, data analysis tests: paired sample t test.

RESEARCH RESULT

Learning is carried out by applying the QuizWhizzer media to mathematics material using English. This aims to increase English vocabulary in mathematics material. With the Quiz Whizzer media, students play games according to those created by the teacher and complete them by practicing their skills in English with mathematics material. Before learning, students are given a pretest and after learning they are given a posttest.

The hypothesis used is

H_o: $\mu_1 \leq \mu_2$(vocabulary ability in mathematics learning after the application of the QuizWhizzer media is less than the vocabulary ability in mathematics learning before the application of the QuizWhizzer media)

H_1: $\mu_1 \geq \mu_2$(vocabulary ability in learning mathematics after applying the QuizWhizzer media is better than vocabulary ability in learning mathematics before applying the QuizWhizzer media)

The results of the paired sample t-test are:

Table 1. Paired Samples Test

			Paired Differences			
				95% Confidence Interval of the Difference		
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t
Pair 1 pretest - posttest	6,1000	1,483	0,332	5,406	6,794	18,29

Results paired sample t test is mark $t\ hitung = 18,292$. Whereas $Ttabel = T_{0,05,20-1} = T_{0,05,19} = 1,729$. It can be seen that $t\ hitung =$ $15,924 > Ttabel = 1,729$, then H$_0$ rejected And accept H1. This means that vocabulary abilities in mathematics learning after applying the QuizWhizzer media are better than vocabulary abilities in mathematics learning before applying the QuizWhizzer media .

CONCLUSION

Based on the research results, it can be concluded that vocabulary abilities in mathematics learning after the application of QuizWhizzer media are better than vocabulary abilities in mathematics learning before the application of QuizWhizzer media **.**

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