

## The Effect of Using Quizlet on Students' Vocabulary Mastery

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### Abstrak

Pada abad ke-21, penggunaan media flashcard elektronik menjadi salah satu pilihan yang dipertimbangkan para pendidik di Indonesia untuk memberikan variasi dalam pembelajaran dengan menggunakan teknologi yang ada. Permasalahan penelitian ini adalah "Apakah terdapat pengaruh yang signifikan Quizlet terhadap penguasaan kosakata siswa di SMA Muhammadiyah 3 Jember pada tahun ajaran 2023/2024?" dan tujuan penelitian ini mengacu pada masalah penelitian adalah untuk mengetahui pengaruh Quizlet terhadap penguasaan kosakata siswa di SMA Muhammadiyah 3 Jember pada tahun ajaran 2023/2024. Berdasarkan permasalahan penelitian dan tujuan penelitian, maka hipotesis yang dijabarkan sebagai berikut: Terdapat pengaruh penggunaan Quizlet terhadap penguasaan kosakata siswa di SMA Muhammadiyah 3 Jember tahun ajaran 2023/2024. Penelitian ini bertujuan untuk mengetahui apakah pemanfaatan Quizlet untuk pembelajaran membaca berdampak pada kosakata siswa di kelas 11 di SMA Muhammadiyah 3 Jember. Pendekatan penelitian pra-eksperimental digunakan dalam penelitian ini untuk mengetahui pengaruh pada subjek penelitian sebelum dan sesudah perlakuan. Penelitian ini menunjukkan signifikansi siswa atau mata pelajaran pada nilai post-test dibandingkan dengan nilai siswa pada saat pre-test. Berdasarkan penelitian Quizlet yang dikombinasikan dengan keterampilan membaca mempengaruhi kosakata siswa di SMA Muhammadiyah 3 Jember tahun ajaran 2023/2024.

**Kata kunci :** *Quizlet, Flashcard, Pendidikan, Penguasaan Kosakata, Membaca.*

### Abstract

In the 21st century, using electronic flashcard media is an option educators in Indonesia consider to provide variety in learning using existing technology. The problem of this research is "Is there any significant effect of Quizlet on students' vocabulary mastery in SMA Muhammadiyah 3 Jember in 2023/2024 academic year?" and the objective of this research referring to the research problem is to find out the effect of Quizlet on students' vocabulary mastery on SMA Muhammadiyah 3 Jember in 2023/2024 academic year. Based on the research problem and the objective of the research, the hypothesis is described as follows: There is an effect of using Quizlet on students' vocabulary mastery in SMA Muhammadiyah 3 Jember in the 2023/2024 academic year. This study aims to determine whether or not utilizing Quizlet to learn reading impacts students' vocabulary in grade 11 at SMA Muhammadiyah 3 Jember. The pre-experimental research approach was employed in this study to determine the effect on research subjects before and after treatment. This research shows the significance of students or subjects in the post-test scores compared to students' scores during the pre-test. Based on the research, Quizlet combined with reading skills affects students' vocabulary at SMA Muhammadiyah 3 Jember in the 2023/2024 academic year.

**Keywords :** *Quizlet, Flashcard, Education, Vocabulary Mastery, Reading.*

## INTRODUCTION

Vocabulary is one of the foundations for knowing and learning English, especially for EFL. Sometimes, it is difficult for them to understand every sentence or word if they can't understand the meaning due to several things, such as their limited knowledge or English vocabulary. Apart from that, vocabulary is also the basis for mastering the four skills in English. When students gain proficiency in basic language skills (Listening, speaking, reading, and writing), it will help them to use language effectively. The problem will also appear in reading skills if a student doesn't have enough vocabulary to understand the meaning of a sentence. This statement aligns with Atalan & Subaşı (2023) statement that vocabulary mastery greatly impacts basic language skill production.

With the technological development that appears in the globalization era, teaching media also has an impact. This era can be seen with Web 2.0 technologies. This technology also plays in vocabulary teaching; this is in line with Atalan & Subaşı (2023) that it would be desirable to conduct more research on the usage of educational settings augmented with Web 2.0 tools in vocabulary instruction. In response to widespread learning challenges, the application of gamification in vocabulary education has emerged as an important trend. Based on Kingsley and Grabner-Hagen (2018), Making a gamification vocabulary learning is one way to engage and excite students about learning words in a fun setting. In addition to thorough vocabulary education, the researcher investigates whether the application of Quizlet in students' vocabulary mastery can be applied effectively and can increase students' vocabulary combined with reading learning. The research objective is to determine if the use of online teaching media affects, especially, Quizlet in XIC students' vocabulary mastery in SMA Muhammadiyah 3 Jember in the 2023/2024 academic year.

Based on Sanosi (2018), Quizlet is a mobile and internet platform (website) application that helps students study by providing learning tools and activities. It allows users to design study modules of terms and their explanations or descriptions. Quizlet refers to these modules as study sets, and they provide a variety of learning techniques, including flashcards, games, collaborative activities, and quizzes. These modalities encourage rote learning, which helps pupils acquire a variety of disciplines, particularly languages and vocabulary. Quizlet's main advantages are ease of use and configuration, superior self-learning using various learning strategies, and the numerous features in its free version.

In addition, vocabulary has several types; one of them is a verb. According to Kann et al. (2018), The ability of a verb to introduce a given number of arguments has a grammatical impact on its sentence level and is thus relevant here. Verbs can be intransitive (e.g., dropped in the vase dropped.), transitive (e.g., dropped in Jessica dropped the vase), or ditransitive (e.g., gave, in Liz gave the boy a gift).

Knowing the meaning of a word can be very helpful in understanding reading comprehension. According to Devanti et al. (2022), Contextual clues are one of the most acceptable ways to guess the meaning of new words or sentences. This method will help them improve their reading comprehension skills. Based on Liu and Zhang's (2018) findings, they found that students who got extensive reading instruction outperformed students who did not by a large margin; similarly, in the pre-post contrasts ( $d = 3.26$ ), students showed significant progress in vocabulary learning after getting extensive reading instruction. In this era, the media teachers use in teaching has many variations, such as AI media. One of the AI media we can use in teaching activities is Quizlet. Quizlet is a medium that serves many games, and teachers can use it in many subjects, including vocabulary teaching. Aprilani and Suryaman (2021) stated that Learning vocabulary is vital because it is only possible to communicate effectively and grasp other abilities with it. On the contrary, it is indisputable that many senior high school pupils have a low-grade understanding of vocabulary mastery. According to Prayogi and Wulandari (2021), Quizlet features a part that allows students to study vocabulary more conveniently and with enjoyment. The features are Flashcards, Learn, Write, Spell, Match, and Test. The flashcard feature allows students to study the term and its meaning by tapping digital flashcards. The Learn function allows students to study

vocabulary by answering multiple-choice or written questions, while the Write feature instructs them to enter their answers to the supplied questions. The Match function requires students to match all of the terms to their definitions. Finally, the Test function allows students to assess their knowledge of a set of vocabulary they have learned by answering true or false, multiple choice, and written questions.

Those menus are potential solutions to distractions students often get in class during the learning process. Quizlet can be an option that teachers can consider using in class, thinking that Quizlet has features that can be said to be like gamification. According to Nuryani & Fadloeli (2021), English learning in schools demands more creative media or facilities to help with learning. Therefore, using Quizlet can be an option to make the students more active in their learning activities. This is in line with Waluyo & Bucol's (2021) Findings that show the effects of the studies on students' vocabulary by using Quizlet's introduction and pre and post-test scores revealed significant improvement. How students' mean vocabulary scores during the ten weeks of treatment revealed that tests 6–10 had higher results than tests 1–5. These data showed that vocabulary learning in gamification at home with Quizlet could enhance students' learning outcomes in class, as measured by vocabulary test scores. The hypothesis of this research is that using Quizlet has an effect on student's vocabulary mastery in SMA Muhammadiyah 3 Jember.

## METHOD

This research uses experimental research to answer the problem of the research. According to Gay et al. (2012), experimental study is the only way to test hypotheses and demonstrate cause-and-effect correlations. It represents the most reliable line of reasoning for the relationships between variables. Experimental research entails modifying at least one independent variable, controlling for other relevant variables, and observing the impact on one or more dependent variables. The treatment's success is measured by comparing pre- and post-test results. This design mitigates numerous validity challenges that the one-shot case study does not, but it needs to address several additional concerns. For example, history and maturation are uncontrollable. If participants perform much better on the post-test than on the pre-test, the improvement may or may not be due to treatment. This study is pre-experimental, using a one-group pre-test-post-test design in which a single group is pre-tested (O), subjected to a treatment (X), and then tested again (O).

The sample was 33 class X C students from SMA Muhammadiyah 3 Jember. The sampling technique used uses probability sampling. The selection of research techniques or research methods has been adjusted to the existing hypothesis, namely focusing on the effect of using Quizlet. The technique used to obtain data is tests (pre-test and post-test). Data analysis techniques include the normality test (Shapiro-Wilk), homogeneity of variance, and hypothesis testing. Before analyzing the results, all results must be homogeneous and normally distributed. Then, the researchers used the Wilcoxon Signed Range test to determine the effect of the action.

## RESULT AND DISCUSSION.

### Result

This research aims to determine the effect of using Quizlet learning media on students' vocabulary mastery. To obtain the results from the data, researchers use several statistical tests, such as descriptive statistics tests.

**Table 1. Descriptive Statistic Result**

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	33	60.00	85.00	75.7576	7.30167
Posttest	33	70.00	100.00	86.0606	7.26266
Valid N (listwise)	33				

Based on Table 1, the lowest score from the pre-test was 60, and the highest score was 85, with a mean of 75.75. In the post-test, the lowest score was 70, and the highest score was 100, with a mean of 86.06.

In addition, data normality tests are needed to assess and find out whether data is normally distributed or not. The data indicator is normally distributed or cannot be seen; if the test result is higher than ( $>0.05$ ), the data is normally distributed. And vice versa, if the test result is less than ( $<0.05$ ), the data is indicated as not normally distributed.

**Table 2. Normality Test Result**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.174	33	.013	.914	33	.013
Posttest	.200	33	.002	.939	33	.063

The normality test results in Table 4.4 show that the significance results are 0.013 and 0.063. It means the data is not normally distributed because the normality value of the pre-test test is lower than 0.05.

This research uses a homogeneity test to determine the diversity of the data. Hypothesis test using IBM SPSS Statistics. The indicator for homogeneous data is if the Sig. value is greater than ( $>0.05$ ), then it can be said that the data is homogeneous. And vice versa, if the Sig. value ( $<0.05$ ), then the data is not homogeneous.

**Table 3. Homogeneity Test Result**

Skor Test	Tests of Homogeneity of Variances			
	Levene Statistic	df1	df2	Sig.
Skor Test Based on Mean	.227	1	64	.635
Based on Median	.283	1	64	.596
Based on Median and with adjusted df	.283	1	62.329	.597

The SPSS test results data in the Table 3 show the Sig. in the table, 0.635. A test is homogeneous if the Sig. value is higher than ( $>0.05$ ), which means the data above is homogeneous.

Researchers use a hypothesis test to determine the significance before and after applying Quizlet media in learning. The non-parametric test used is the Wilcoxon Signed Range as the alternative test if the data is not normally distributed. If the result of the Sig value is less than ( $<0.05$ ), the alternative test is accepted.

**Table 4. Hypothesis Test Result**

Test Statistics <sup>a</sup>	
	post-test - pre-test
Z	-4.310 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on the test results above, table 4.6 shows that the significant value is  $<0.05$ , namely 0.000, which means that the alternative hypothesis in this study ( $H_a$ ) is be accepted dan  $H_0$  is rejected or there is an effect after taught by using Quizlet on students' vocabulary mastery on SMA Muhammadiyah 3 Jember

## Discussion

This study examined how using Quizlet in class might affect students' vocabulary mastery at SMA Muhammadiyah 3 Jember throughout the 2023/2024 academic year. At the first meeting, the researcher conducted a simulation to use the media (Quizlet) and a pre-test with analytical exposition text related to their lesson plan. That test is consistent with the research's aim to assess the student's vocabulary and reading skills. The researcher administered the test, analyzed the results, and reported that the pre-test average score was 75.75.

Based on observations, at the first meeting, students were puzzled when they were practising using Quizlet and had difficulties making an account and signing in to the class that the researcher had developed. There are also issues with the school's WiFi network, which causes pupils to spend a lengthy time logging in and verifying. However, this can be circumvented by students using private internet and researchers assisting in providing internet access to students experiencing difficulties.

Apart from that, students also enjoy learning that uses the gamification method with this media. That's because pictures and audio accompany the form of explanation and learning for every word in the media, which increases knowledge in vocabulary and speaking. Aside from that, Quizlet's match feature can help pupils remember terms from the preceding material in a more enjoyable way. This aligns with Atalan & Subaşı (2023) finding that show The Live menu made vocabulary learning fun. Based on their progress on Quizlet and their attributions to the game, the data collection procedure observed that the majority of the learners were engaged mostly in this game.

According to the reading aspect, there are eight aspects: main idea (topic), expressions/idioms/phrases in context, inference (implied detail), grammatical features, detail (scanning for a specifically stated detail), excluding facts not written (unstated details), supporting idea(s), vocabulary in context. Several aspects have improved, including the main idea (topic), expressions/idioms/phrases in context, and inference (implied detail). Some students were not careful enough throughout the pre-test, resulting in low pre-test scores. However, the post-test results improved, indicating the influence of students following the treatment. According to Atalan & Subaşı (2023) research, 19% of students in the Quizlet group approved that having multiple flashcards with different topics set, clicking on the 'Audio on' button, and seeing the picture of the word helped them recall the words. They conveyed that 'flip and flow' helped them recognize words learned in class. The treatment improves reading comprehension and vocabulary knowledge. After the explanations above, we can conclude that the use of Quizlet as a medium of learning affects students' reading comprehension and vocabulary mastery. It can be seen from the hypothesis test that it has a result of 0.000 or  $<0.05$ , which means  $H_a$  is accepted.

## CONCLUSION

The results of this research show an effect on student vocabulary through reading material with Quizlet application before students get treatment with Quizlet and after getting treatment with Quizlet. The result indicates that Quizlet has a positive effect in improving student vocabulary mastery. For future teachers, using flashcard media such as Quizlet can positively affect student vocabulary mastery, and teachers can consider using Quizlet as their teaching media. For future writers, the author hopes that the findings and viewpoints will serve as references and information for further research. Also, using Quizlet material is quite effective.

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