



## **The Effect of Using Quizlet Application in Improving Students' Vocabulary Mastery**

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### **Abstrak**

Teknologi dalam bidang pendidikan mendapat banyak perhatian karena dapat membantu permasalahan pembelajaran modern saat ini. Kurangnya minat dan keterlibatan siswa yang masih tergolong minim selama kegiatan belajar mengajar memotivasi guru memanfaatkan teknologi sebagai sarana pembelajaran untuk meningkatkan minat belajar siswa, khususnya dalam menambah kosa kata dalam kegiatan belajar Bahasa Inggris. Menentukan apakah aplikasi Quizlet efektif untuk memperluas kosa kata Bahasa Inggris siswa merupakan tujuan dari penelitian ini. Penelitian ini menggunakan desain kuasi eksperimen dengan sampel penelitian berjumlah 45 siswa kelas VII SMPN 8 Dumai. Siswa menjalani tes awal yang dilakukan untuk mengukur kemampuan kosa kata Bahasa Inggris awal siswa. Tes akhir dilakukan setelah empat kali pertemuan perlakuan, dengan menggunakan aplikasi Quizlet sebagai alat pendukung dalam pembelajaran Bahasa Inggris. Data yang dikumpulkan dianalisis dengan rumus uji-t dan tes Mann-Whitney. Berdasarkan pengujian yang dilakukan, hasil penelitian menyatakan bahwa nilai Asym Sig. sebesar  $0,000 < 0,05$ . Pernyataan tersebut menunjukkan hipotesis alternatif ( $H_a$ ) yaitu penggunaan aplikasi Quizlet memiliki pengaruh yang signifikan terhadap kemampuan kosa kata Bahasa Inggris siswa kelas tujuh SMPN 8 Dumai diterima.

**Kata Kunci:** Kosa Kata, Aplikasi Quizlet, Siswa Sekolah Menengah Pertama

### **Abstract**

Technology in education receives a lot of attention because it can help modern learning problems today. The lack of interest and involvement of students during teaching and learning activities motivates teachers to utilize technology for students to increase their interest, especially in vocabulary building in English language learning. To determine whether the Quizlet application is effective in expanding students' English vocabulary is the purpose of this research. The design of this research was quasi-experimental with a sample size of 45 seventh-grade students of SMPN 8 Dumai. Students underwent an initial test which was conducted to measure students' initial English word city ability. The post-test was conducted after four treatment meetings, in which the Quizlet application was used as a supporting tool in learning English. In analyzing the collected data, the t-test formula and Mann-Whitney test were used. From the analysis, the results showed that the Asym Sig. value was  $0.000 < 0.05$ . This statement shows that the alternative hypothesis ( $H_a$ ), namely that using the Quizlet application significantly affects the English vocabulary skills of seventh-grade students of SMPN 8 Dumai, is accepted.

**Keywords:** Vocabulary, Quizlet Application, Junior High School Students

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## INTRODUCTION

Mastering the vocabulary of the language being learned by a student is considered as being one of the most necessary and significant in the process of language learning. As Susanto (2017) states, when it comes to learning a new language, it is an important component to know the vocabulary. In addition, Susanto argues that when English is taught in a classroom or other formal class, vocabulary has an important part and has been considered as the head of language. The purpose being accomplished is how students will comprehend the concept of unfamiliar words, increase their vocabulary through their own efforts, and successfully utilize the words in the communication and learning processes.

Some aspects of vocabulary should be taught to students when learning vocabulary. According to (Smith, 2022), some aspects of vocabulary that students ought to be familiar with are: meaning which is the intent or purpose of something, spelling which define as the activity of writing or naming the word's letters, pronunciation stand for the act or manner of pronouncing words, word family refers to a group of closely related words with the same root word, part of speech stand for words of a language which can be collected into classes of formal equivalents, frequency of words, collocation are words or phrases that are frequently used in conjunction with another word or phrase and word use is the usage of a word, phrase, or idea in a language.

As per the findings of Kemendikbud (2013), the curriculum 2013 for junior high school English education centers on five distinct types of texts, namely descriptive text, recount text, narrative text, report text, and procedure text. However, this particular study exclusively concentrates on descriptive text, focusing on students' proficiency in comprehending its overall structure, social utility, and linguistic characteristics. In accordance with Rianda's definition in 2020, descriptive text can be described as a form of literary work with the primary objective of furnishing extensive details and information about specific individuals, objects, or places. He further elaborates that the fundamental purpose of descriptive text is to paint a vivid picture of the attributes and characteristics of the subject matter, whether it be an object, person, or location. Kurniawan, in 2015, identifies two fundamental components of descriptive text: identification and description. Additionally, he delves into the vocabulary, mechanics, and language attributes associated with descriptive text, including the use of the simple present tense, action verbs, and adjectives.

As a result, it is important that students have a good understanding about language features of descriptive text (Kurniawan, 2015a). In relation to the preceding concept, the following are English descriptive text indicators: grammar, vocabulary, and structure which are identification and description (Fariza, 2016). However, junior high school students only learn basic material about descriptive text such as composing simple monologues using the right language features. Nevertheless, students typically struggle with learning descriptive texts due to their limited vocabulary.

Based on the researcher's experience during the *Kampus Mengajar Angkatan 2* Program in SMP N 8 Dumai, the researcher found that students had less knowledge of English vocabulary. They cannot understand and have no interest in inquiring further about English subjects. This is reflected from the grades of the students in English. Researcher claimed that due to students' limited vocabularies and grammatical abilities, they are unable to comprehend descriptive text. It is supported by one of the English teachers at SMPN 8 Dumai, who said that most students lacked interest in pursuing English language learning. When the researcher asked the students why they had no interest in English subjects, they responded by saying that English is hard and they did not think it was important. Since English was not their mother tongue, it became harder for English teachers to teach them. It was possible for the teacher to use an interactive teaching method because it is more interesting for students and will improve their enthusiasm.

Permana, (2020) says that teachers should employ interactive teaching techniques to facilitate students' vocabulary acquisition. There exist various approaches to enhance students' lexicon. As stated by Utku & Dolgunsöz, (2018), students display heightened motivation when they engage with digital tools as educational

resources. They further note that these students, being digital natives, are accustomed to online learning. One such online tool suitable for vocabulary acquisition is the Quizlet application.

According to Sangtuptim (2018), Quizlet stands out as a mobile and web-based study app that can be used by students to study information through games and learning tools. In Quizlet, vocabulary sets are able to be distributed in a variety of ways, such as embedding, URL links, and QR codes, allowing students to research at their own pace (Cappon, 2020). By using Quizlet in English learning, it'll help students learn more vocabulary and understand how to use it in conversation. This outcome is backed up by earlier research in which the Quizlet application used as vocabulary learning activities was effective because students were more attracted and more motivated to improve vocabulary mastery (Sitorus, 2021). In addition, Quizlet application was an effective media that motivated students to learn vocabulary (Christanti, 2018), helped them understand more, and helped them achieve higher scores (Sanosi, 2018), language learning mobile app specifically the Quizlet application is beneficial in terms of student motivation and have semi-permanent benefits (Akhshik, 2021), and have impact on students' vocabulary mastery (Setiawan et al., 2021). By seeing the researchers investigating the use of the Quizlet application as an educational tool, the researcher wants to expand the research at SMPN 8 Dumai titled "The Effect of Using Quizlet Application in Improving Students' Vocabulary Mastery". The differences between this research compared to those studies are in terms of objects, the purpose, and the methods. All of those studies have different object which with similar problem of vocabulary. In terms of purpose, the purpose of second research is to find out students' perceptions about using Quizlet application. On the contrary, this research is focusing on the effect using Quizlet application to improve students' vocabulary. And the last one is methods. Some of those studies uses interview and questionnaire the get the data, while in this research only used vocabulary test. Therefore, the object, the purpose, and the methods make this research different compared to those relevant studies.

## METHOD

To examine if Quizlet application usage can significantly improve students' vocabulary skills in grade VII at SMPN 8 Dumai is the purpose of this research. The design of this research is quasi-experimental (Saworno, 2018) with pretest-posttest control group setting. Two groups were involved: grade 7-1 as the control group and grade 7-4 as the experimental group. The data collection process included conducting vocabulary assessments related to descriptive texts about places. The purpose of this assessment was to evaluate students' performance before and after they used the Quizlet app to learn English.

Data was collected using a vocabulary test. to assess a knowledge or ability of students in completing a specific task(Read, 2021). This research entails three phases which include pretest, treatment, and posttest. However, the data collection procedures involved: First, the pretest was administered before the treatment to assess the students' vocabulary proficiency prior to their exposure to the Quizlet application. Second, the treatment phase comprised four sessions, each featuring distinct activities. The Quizlet application was employed as the instructional tool in the experimental group, while the control group did not utilize the Quizlet application during their learning process. Both groups were taught using the same instructional material. Lastly, the posttest employed the same set of 24 questions as the pretest, albeit with different content. However, the composition and characteristics of the test remained unchanged. The posttest was utilized to see if the treatment could improve the students' vocabulary ability or not.

The pretest and posttest took the form of vocabulary assessments which have different questions as described below:

**Table 1. Blueprint of the Pretest**

Aspects	Number of Questions
Verb	1, 2
Noun	4, 5, 6, 7, 8, 11, 14

Adjective	3, 12, 13
Participial Adjective	24
Preposition of Place	9, 15, 16, 17, 18, 19, 21, 22, 23
Adverb of place	10, 20
<b>Total</b>	<b>24</b>

The vocabulary components assessed were verbs, nouns, adjectives, participial adjectives, adverbs of place, and prepositions of place. The posttest blueprint is outlined in the table below:

**Table 2. Blueprint of the Posttest**

Aspects	Number of Questions
Verb	1, 2, 3, 4, 19
Noun	5, 6, 7, 8, 9, 10
Adjective	13, 14, 16
Participial Adjective	23, 24
Preposition of Place	11, 17, 19, 20, 21, 22
Adverb of place	12, 15, 18
<b>Total</b>	<b>24</b>

This research used Statistical Product and Service Solution (SPSS 26) to calculate the data. Following the administration of the post-test, the final step involved assessing whether the hypotheses were accepted or rejected. To perform the statistical analysis, the T-test formula was utilized. As per (Supriadi, 2021) when evaluating the hypotheses, the null hypothesis (H0) is discarded, and the alternative hypothesis (H1) is embraced when the p-value (significance level, two-tailed) is below 0.05, and the t-value surpasses the critical t-table value of 2.021 at a 5% significance level. Conversely, if the average score of the pre-test is higher than that of the post-test, the null hypothesis (H0) is accepted, while the alternative hypothesis (H1) is rejected.

## RESEARCH FINDINGS AND THE DISCUSSION

### Research Findings

#### *Pretest and Posttest Result*

The students were given a pretest to gather information regarding their vocabulary proficiency. This data was intended for comparison with the data obtained from the posttest following the implementation of the treatment. The two groups' results are presented in the table below:

**Table 3. Descriptive Statistics**

	Minimum	Maximum	Mean	Std. Deviation
Pretest Experimental	25.00	95.33	72.4735	15.45637
Posttest Experimental	45.84	95.33	87.4825	11.81416
Pretest Control	20.83	100.00	64.1665	22.10592
Posttest Control	41.67	95.83	70.4180	16.49680
Valid N (listwise)				

The table above shows that the experimental class minimum score is 25 on pretest and 45,84 on posttest while the maximum score is 95,33 on both tests. Meanwhile, the score of the control class is 20,83 as minimum score and 100 as maximum score on pretest. In addition, on the posttest, the control class got 41,67 as minimum and 95,83 as maximum.

#### *Normality Test*

In this research, a normality assessment for the data of pre-test and post-test in experimental group as well as control group was conducted using the Liliefors test within IBM SPSS Statistics version 26. The test results are as shown below:

**Table 4. Tests of Normality**

	Class	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Vocabulary Test Result	Pretest Experiment	.159	20	.200*	.878	20	.017
	Posttest Experiment	.253	20	.002	.690	20	.000
	Pretest Control	.153	25	.133	.952	25	.271
	Posttest Control	.135	25	.200*	.918	25	.047
a. Lilliefors Significance Correction							
*. This is a lower bound of the true significance.							

The normality significance of the pretest as shown in the table above is 0,17 for experimental class and 0,271. Therefore, the pretest data of both classes are normally distributed because  $0,17 > 0,05$  is the same as  $0,271 > 0,05$ . Meanwhile, the table also shows that the significance posttest score of 0 was recorded for the experimental class, while the control class had a score of 0.47. This means that the two classes are not normally distributed because  $0,47 < 0,05$  and  $0 < 0,05$ . According to Akhtar (2017), one of the reasons why the data is not normal is the presence of outliers. Outliers are data that have extreme scores, either extreme high or extreme low.

### Testing Hypothesis

Since there is data that is not normally distributed, the pretest and posttest outcomes are assessed by means of the Mann-Whitney Test for comparison which is part of an alternative non-parametric statistic of t-test for independent variables or 2 (two) unrelated samples which are not normally distributed.

As indicated by the following table, the results of the paired samples test of the pretest and posttest data are as follows:

**Table 5. Test Statistics**

Vocabulary Test Result	
Mann-Whitney U	88.000
Wilcoxon W	413.000
Z	-3.724
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: Class	

The results of the Mann-Whitney test indicate the value of Asymptotic Significance (two-tailed) of 0.000, which is below the threshold of 0.05. Consequently, these results show that the alternative hypothesis ( $H_a$ ) is accepted, and the null hypothesis ( $H_o$ ) is rejected. This implies that a significant difference exists in the effectiveness of the Quizlet app in improving vocabulary skills among seventh grade students at SMPN 8 Dumai.

### Discussion

Referring to the data collection received after performing this research, the outcome shows a substantial enhancement in students' vocabulary proficiency following the Quizlet Application treatment. Analysis of the experimental data that was carried out in this research found significant and clear differences in the level of vocabulary mastery shown by the two different groups of students. The class which targeted the Quizlet application implementation is called experimental class, showed significant vocabulary mastery improvement as opposed to the control class, where no treatment was given. The pretest assessments of student performance showed an average score of 72.48 in the experimental class and an average score of 65 in the control class.

Through the treatment implementation in the experimental class using the Quizlet application, the result of the post-test showed a marked change in the students' vocabulary acquisition. Specifically, the experimental class showed an increase in their average score, reaching 79.06. This notable improvement in vocabulary mastery highlights the Quizlet application's positive effect as an educational and learning media. In contrast, the

control class, which did not get this treatment, did not show the same change in their mean post-test score, which was 58.33.

After conducting statistical analysis with the Mann-Whitney test, it was shown a value of Asymp. Sig (2-tailed) value of 0.000 which is less compared to 0.05. Consequently, the alternative hypothesis ( $H_a$ ) is accepted and the null hypothesis ( $H_o$ ) is rejected. This signifies the impact of using the Quizlet app in improving vocabulary skills among seventh grade students at SMPN 8 Dumai.

This outcome is backed up by earlier research in which the Quizlet application used as vocabulary learning activities was effective because students were more attracted and more motivated to improve vocabulary mastery (Sitorus, 2021). In addition, Quizlet application was an effective media that motivated students to learn vocabulary, helped them understand more, and helped them achieve higher scores (Christanti, 2018), language learning mobile app specifically the Quizlet application is beneficial in terms of student motivation and have semi-permanent benefits (Akshik, 2021) and have impact on students' vocabulary mastery (Setiawan et al., 2021). These researches confirmed that Quizlet application usage in learning can increase students' comprehension and improve their vocabulary. These results also showed that Quizlet application can become an effective medium in improving students' vocabulary. By utilizing features like flashcards, interactive games and tests, students can have a fun and structured way to increase their vocabulary ability. Research findings from this research can be a valuable reference for the utilization of the Quizlet application in an educational context to help improve students' vocabulary.

After doing all these steps, some weaknesses were found by researcher when the research was performed. The first time when the researcher entered and started the classroom by using Quizlet application treatment, some students had problems with the speed of the internet connection which could affect their focus. When the researcher used "Live Mode" which required students to work together in teams, the slow internet connection greatly affected the team's performance in answering questions which ultimately made them fail in that mode. Besides the problem above, the researcher also found the strength of applying Quizlet application into the educational process. This includes the fact that students find learning English enjoyable and the application user-friendly, as Quizlet resembles a game. Furthermore, it potentially enhances students' vocabulary.

## CONCLUSION

To figure out whether there was a significant impact of using the Quizlet application in improving the vocabulary skills of seventh-grade students at SMPN 8 Dumai was the aim of this research. In this research, 2 groups were selected: an experimental class and a control class. The experimental class received treatment using the Quizlet application, while the control class did not. According to the data analysis presented, the findings indicate that the Quizlet application demonstrates effectiveness in improving students' vocabulary proficiency. This conclusion is supported by the observation the improvement of post-test score of both classes which are attributed to the Quizlet application's capacity to aid students in enhancing their listening skills, translating words, and, most importantly, expanding their vocabulary.

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