

**THE EFFECTIVENESS OF QUIZLET APPLICATION IN STUDENTS
VOCABULARY MASTERY AT FIRST GRADE CULINARY ART OF SMK
MUHAMMADIYAH 3 METRO**

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Abstract

Vocabulary is a fundamental skill in learning English, crucial for developing reading, speaking, writing, and listening abilities. This research investigates the effectiveness of the Quizlet application in students' vocabulary mastery among first-grade Culinary Art students. Based on the problems, the purposes of this research are: 1) To know whether the Quizlet application is effective in students' vocabulary mastery at first grade Culinary Art of SMK Muhammadiyah 3 Metro or not. 2) To find out whether there is significant effectiveness the Quizlet application is implemented in students' vocabulary mastery at first grade Culinary of SMK Muhammadiyah 3 Metro. This research use quantitative quasi experimental as a research design, the research involved pre-test and post-test with two classes: an experimental class (Culinary Art 1) using Quizlet and a control class (Culinary Art 2) with traditional methods. The sample comprised 30 students. Pre-test results revealed mean scores of 69.13 for the experimental group and 66.40 for the control group. After treatment, the experimental group's mean score increased to 88.80, compared to 80.13 for the control group. Statistical analysis showed a significant difference, indicating that the Quizlet application substantially enhances vocabulary mastery. The results of the experimental class are significantly higher than the pre-test, this research also show that using Quizlet is effective in increasing students' vocabulary mastery. The researcher hopes this research motivates students to actively engage in vocabulary learning using interactive media like Quizlet. This can enhance their enthusiasm and improve their English language outcomes.

Keywords: *Vocabulary Mastery, Quizlet Application*

INTRODUCTION

Vocabulary is a fundamental component in mastering any language, serving as the bedrock upon which reading, writing, speaking, and listening skills are built. Without a strong vocabulary foundation, effective communication becomes challenging and students often struggle to fully engage with and comprehend the language. The current vocabulary teaching approaches, often reliant on rote memorization, fail to captivate students' interest and effectively

support their learning needs. Internal factors such as lack of motivation, inadequate learning strategies, and limited cognitive abilities further exacerbate the problem. Externally, conventional teaching methods and less engaging learning materials contribute to the lack of progress. Consequently, students frequently face difficulties in understanding instructions, comprehending texts, and expressing them, which hampers their overall language proficiency.

Apart from that, researchers obtained vocabulary mastery scores from the results of a pre-survey of class X SMK Muhammadiyah 3 Metro of Culinary Art. Vocabulary scores can be seen in the table below:

Table Pre-survey Data Vocabulary Score at First Grade Culinary Art of SMK Muhammadiyah 3 Metro

NO.	Categories	Score	Frequency	Percentages
1	Excellent	> 90 – 100	0	0%
2	Good	> 80 – 90	10	33.3%
3	Fair	> 70 -80	15	50%
4	Poor	> 60 – 70	5	16.7%
5	Failed	< 60	0	0%
Total			30	100%

Source: English teacher of SMK Muhammadiyah 3 Metro

According to the survey, 0% of students scored in the "Excellent" range, 33.3% in the "Good" range, 50% in the "Fair" range, and 16.7% in the "Poor" range. This data underscores a critical need for improved vocabulary instruction methods.

To address these challenges, integrating modern educational media like the Quizlet application offers a promising solution. Quizlet provides an interactive and engaging platform for vocabulary learning through features such as flashcards, games, and quizzes. This application allows students to engage with vocabulary in a more dynamic and personalized manner, potentially increasing their motivation and understanding. This article explores the effectiveness of using Quizlet as a tool for enhancing vocabulary instruction in the Culinary Art program at SMK Muhammadiyah 3 Metro, with the aim of improving students' vocabulary mastery.

THEORITICAL FRAMEWORK

1. Vocabulary

Vocabulary is a cornerstone of language learning, vital for mastering speaking, listening, reading, and writing skills (Yudha & Mandasari, 2021). It enables effective communication and comprehension, as vocabulary provides the means to convey and understand meaning. However, traditional rote memorization methods can make learning vocabulary tedious and may diminish students' interest in English (Hariati, 2020).

Vocabulary should not be isolated from other language skills but integrated across them to avoid confusion and enhance learning (Yudha & Mandasari,

2021). Effective vocabulary instruction involves understanding words' meanings and their practical application in various contexts (Ernie Zaenab Musa et al., 2022). It also requires active use in both speaking and writing to achieve proficiency and construct meaningful sentences (Madhanty et al., 2022).

2. Media

Media are essential in enhancing classroom learning by facilitating effective information transmission (Zulhijah, 2020). They are crucial for English language learning and are especially useful when they connect to students' lives. Media types include visual (photos, posters), audio (recordings, radio), audiovisual (films, videos), multimedia (sound, animation, graphics), and realia (tangible objects from nature). Each type helps to convey information, stimulate thought, and engage students in the learning process.

3. Quizlet Application

Quizlet is a mobile and web-based learning application designed to support various educational needs. Tanjung & Daulay (2022) highlight its versatility, with features like flashcards and study sets accessible via smartphones and laptops, allowing for flexible learning anytime. Setiawan et al. (2021) describe Quizlet as providing diverse learning modes, including games and quizzes, which help in mastering subjects, especially vocabulary. Overall, Quizlet's engaging tools make it a valuable resource for effective and accessible vocabulary learning. In summary, Quizlet is an effective learning media with features that facilitate vocabulary acquisition. Its engaging elements, such as flashcards, games, and collaborative activities, make it a valuable resource for modern education, providing an accessible and dynamic way to enhance vocabulary learning.

METHOD

This research employs a quantitative experimental design to evaluate the effectiveness of the Quizlet application on vocabulary mastery. According to Zubair (2020), this method involves manipulating independent variables to observe their impact on dependent variables in a controlled environment. The design includes two groups: an experimental group using Quizlet and a control group without it.

The research uses cluster random sampling and follows a pre-test, treatment, and post-test format. The pre-test assesses initial vocabulary skills, the experimental group receives Quizlet-based treatment, and the post-test measures improvement. This approach, adapted from Sugiyono (2019), is outlined in the table below:

Table of Research Design

Class	Pre-test	Treatment	Post-test
C	O1	-	O2
E	O1	X	O2

Source (Sugiyono, 2019)

Note:

E : Experiment Class

- C : Control Class
- O1: Pre-Test
- : Treatment without using Quizlet Application
- X : Treatment by using Quizlet Application
- O2: Post-Test

REUSULT AND DISCUSSION

The research data from pre-tests and post-tests for both the experimental and control classes. It includes research results, normality and homogeneity tests, hypothesis testing, and further discussion. The results indicate notable differences between the experimental class, which used Quizlet, and the control class, which employed traditional teaching methods, in terms of vocabulary mastery. This research was conducted at SMK Muhammadiyah 3 Metro with first grade students during the 2024/2025 academic year.

1. Pre-Test Results

The pre-test, administered on July 16, 2024, assessed students' initial vocabulary knowledge. The average score for the experimental class was 69.13, with a standard deviation of 4.658. The control class had an average score of 66.40 and a standard deviation of 8.296.

Table Pre-Test Results in the Experimental Class and Control Class

Descriptive Statistics							
	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Sum Statistic	Mean Statistic	Std. Error
Pretest Experiment	15	18	60	78	1037	69.13	1.203
Pretest Control	15	29	50	79	996	66.40	2.142
Valid N (list wise)	15						

Descriptive Statistics		
	Std. Deviation Statistic	Variance Statistic
Pretest Experiment	4.658	21.695
Pretests Control	8.296	68.829
Valid N (list wise)		

2. Post-Test Results

The post-test, conducted on July 27 and July 30, 2024, showed significant improvement. The experimental class achieved a mean score of 88.80 with a standard deviation of 3.610, while the control class had a mean score of 80.13 and a standard deviation of 3.159.

Table Post-Test Results in the Experimental Class and Control Class

Descriptive Statistics							
	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Sum Statistic	Mean Statistic	Std. Error
Post-test Experiment	15	15	80	95	1332	88.80	.932
Post-test Control	15	10	75	85	1202	80.13	.816

Valid N (list wise)	15					
Descriptive Statistics						
		Std. Deviation Statistic	Variance Statistic			
Post-test Experiment		3.610	13.029			
Post-test Control		3.159	9.981			
Valid N (list wise)						

3. Data Description and Frequency Distribution

Pre-test data showed that 93.5% of students in the experimental class were in the 'Good' or 'Excellent' categories, compared to 73.5% in the control class. Post-test results showed 93.5% of the experimental class in the 'Excellent' category, while 66.7% of the control class was in 'Good' and 33.4% in 'Excellent'.

Table Pre-Test Frequency Distribution in the Control Class

No	Categories	Score	Frequency	Persantase
1.	Excellent	81-100	0	0%
2.	Good	61-80	11	73.5%
3.	Fair	41-60	4	26.6%
4.	Poor	21-40	0	0%
5.	Failed	0-20	0	0%
Total			15	100%

Table Pre-Test Frequency Distribution in the Experimental Class

No	Categories	Score	Frequency	Percentage
1.	Excellent	81-100	0	0%
2.	Good	61-80	14	93.4%
3.	Fair	41-60	1	6.7%
4.	Poor	21-40	0	0%
5.	Failed	0-20	0	0%
Total			15	100%

Table Post-Test Frequency Distribution in the Control Class

No	Categories	Score	Frequency	Percentage
1.	Excellent	81-100	5	33.4%
2.	Good	61-80	10	66.7%
3.	Fair	41-60	0	0%
4.	Poor	21-40	0	0%
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4.	Poor	21-40	0	0%
5.	Failed	0-20	0	0%
Total			15	100%

4. Hypothesis Testing

The hypotheses were tested using t-tests, with results indicating significant effects. The independent samples t-test showed a significant difference between the experimental and control classes ($p < 0.05$), confirming the effectiveness of Quizlet. The paired sample t-test revealed significant improvement in the experimental class post-treatment ($p < 0.05$), validating the effectiveness of Quizlet in enhancing vocabulary mastery.

Table Independent Samples T-Test

Group Statistics

Class	N	Mean	Std. Deviation	Std. Error Mean
Nilai Post-test Culinary Art 2 (Control)	15	80.13	3.159	.816
Post-test Culinary Art 1 (Experiment)	15	88.80	3.610	.932

Independent Samples Test

t-test for Equality of Means

Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
.000	-8.667	1.239	-11.204	-6.130
			-11.206	-6.128

From the table data above that the sigmoid value is <0.05 , it can also be seen from the average value of the experimental class which is higher than the control class ($88.80 > 80.13$). With a significant difference between the two values. In conclusion, there is a significant influence from using Quizlet on students' vocabulary mastery at SMK Muhammadiyah 3 Metro in tenth grade.

Table Paired Sample Test for Control and Experimental Classes

Paired Samples Test

Paired Differences

Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	
			Lower	Upper
-19.667	3.994	1.031	-21.878	-17.456
-13.733	7.815	2.018	-18.061	-9.405

The results of the Paired Samples Test are determined by the significant value. This value will later be used to determine which hypothesis is accepted. Ho is accepted if the significant value is higher than 0.05. Conversely, if Ho is rejected, the significant value is lower than 0.05. Based on the results above, the value of the paired sample test Sig (2-tailed) is $0.00 \leq 0.05$ for both the experimental class and the control class, meaning that Ha is accepted.

Table Paired Sample Statistics for Experimental and Control Classes
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test Experiment	69.13	15	4.658	1.203
	Post-test Experiment	88.80	15	3.610	.932
Pair 2	Pre-test Control	66.40	15	8.296	2.142
	Post-test Control	80.13	15	3.159	.816

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-test Experiment & Post-test Experiment	15	.558	.031
Pair 2	Pre-test Control & Post-test Control	15	.338	.217

These results demonstrate the significant impact of using Quizlet in students' vocabulary mastery compared to traditional teaching methods. Researcher can draw the conclusion that the application of Quizlet affects students' vocabulary mastery and helps students increase their vocabulary. Hypothesis testing results, testing the first hypothesis shows that the results of the experimental class are significantly higher than the pre-test. The results of this research show that using Quizlet is effective in increasing students' vocabulary mastery

CONCLUSION AND SUGGESTION

This research evaluated the effectiveness of the Quizlet application in improving vocabulary mastery among first-year Culinary Art students at SMK Muhammadiyah 3 Metro. The results show that Quizlet significantly enhanced vocabulary learning. The pre-test indicated that the experimental class (using Quizlet) had a higher average score (69.13) compared to the control class (66.40). Post-test results further demonstrated a significant improvement, with the experimental class scoring an average of 88.80, while the control class averaged 80.13. Statistical tests confirmed these differences were significant ($sig < 0.05$), validating the effectiveness of Quizlet in boosting vocabulary skills.

Based on the findings, several recommendations can be made. For students, it is encouraged to actively engage with interactive media such as Quizlet to boost vocabulary learning and improve English language skills. For teachers, incorporating similar interactive tools can enhance the effectiveness of vocabulary instruction, making lessons more engaging and impactful. Future researchers are advised to explore innovative educational tools and methodologies to further advance English teaching practices. The insights from

this research can serve as a foundation for optimizing teaching strategies and improving vocabulary acquisition in educational settings.

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