

Instructional Media: Increasing Students' Vocabulary through Word Cards

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Abstract

This study aimed to investigate the effectiveness of using word cards in increasing the vocabulary of Grade VIII students at SMP Negeri 3 Sausu. A quasi-experimental design was employed, involving two classes: Class VIII A, consisting of 21 students, served as the experimental class, while class VIII B, with 20 students, served as the control class. The experimental class received instruction using word cards as the treatment, whereas the control class was taught using conventional teaching methods. The samples were selected through total sampling. The study was conducted through a series of procedures, including a pre-test, the treatment, and a post-test. Data were collected using tests, and quantitative analysis was performed to compare students' scores before and after the treatment. The results indicated a significant difference between pre-test and post-test scores. At a significance level of 0.05, the t-count was 6.62, exceeding the t-table value of 1.68, indicating that the research hypothesis was accepted. These findings demonstrate that the use of word cards is an effective strategy for improving the vocabulary of Grade VIII students at SMP Negeri 3 Sausu. Moreover, the results suggest that word cards positively influence students' vocabulary retention, as they facilitate better memorization and recall of target words during the learning process as instructional media. However, this study was limited by its relatively small sample size and its focus on concrete nouns and descriptive adjectives. Future research is recommended to involve larger and more diverse samples, as well as a broader range of vocabulary categories, in order to obtain a more comprehensive understanding of the effectiveness of word cards in language learning.

Keywords: instructional media, vocabulary, word cards

INTRODUCTION

Nowadays, having a good understanding of vocabulary is considered very important when someone is learning English in a country where English is not the main language, especially because vocabulary mastery is the main thing that helps you talk to other people and understand what is going on. Even if people know grammar, they cannot use the language effectively without enough vocabulary. As Wilkins (1972) in (Salawazo et al., 2020) strongly stated, "without grammar very little can be conveyed, but without vocabulary nothing can be conveyed," which clearly illustrates that vocabulary plays a more central role than grammar in ensuring successful communication. This condition underlines the fact that improving vocabulary mastery is not merely an additional component of English learning, but rather the foundation upon which all other language skills are built. Yudha &

Mandasari (2021) stated that the acquisition of vocabulary is the first and most essential stage in mastering a language. This suggests that if learners do not have a good command of vocabulary, it will seriously affect their capacity to grasp and utilize the language successfully. Similarly, Alqahtani (2015) points out that limited vocabulary knowledge in a second language can obstruct successful communication, regardless of how well a learner understands grammar or pronunciation.

Within the school context, vocabulary learning often becomes a challenge for many learners. Nation (2013) explains that vocabulary growth requires repeated exposure and meaningful practice in order to be effective. However, in many classrooms, opportunities for vocabulary practice are limited, so students tend to quickly forget newly learned words. This makes vocabulary mastery one of the main obstacles hindering students' English development.

The more vocabulary a person has, the greater their ability to convey ideas and understand information in English. According to Hornby (1995), vocabulary encompasses all the words a person knows or uses, which essentially includes all the words in a language. In other words, vocabulary encompasses all the words an individual possesses as well as all the words in a particular language. In addition, Richard and Renandya (2002) stated that a person's vocabulary is an element of their language ability that reflects their skills in speaking, listening, reading and writing. Of course, when we listen to a conversation or music, we need vocabulary to understand what we hear. Likewise speaking, when we want to convey something we need some vocabulary to get the words out. Similarly with reading, the vocabulary makes reading easier because we understand what is being read. Likewise in writing, when writing, we need to use several words to produce a sentence or paragraph.

Nevertheless, As shown by the initial assessment conducted by the research team at the educational institution, the researchers found that the main problem of students especially in grade eight was the lack of vocabulary. This can be seen in the learning process, only a few students can answer and understand what their teacher teaches. They often struggled to understand what their teacher says in English. Therefore, the problem will have an impact on students' learning outcomes and they will find it difficult to understand the materials.

Effective vocabulary teaching plays a very important role in the classroom. Bromley (2004) states that vocabulary holds some important roles in teaching learning process. Teacher must have the appropriate strategy for teaching vocabulary, so that students can understand and master it well. Teacher needs instructional media to support the learning process. Puyada, Ganefri, Ambiyar, Wulansari, and Hayadi (2018) explain that Instructional media includes all forms of aids that can be used during the learning process to increase effectiveness and efficiency in achieving learning objectives. They also emphasize that to achieve these objectives, teachers need to choose media, methods, and techniques that are appropriate to the characteristics of students, so that the learning experience becomes more interesting and not monotonous. Additionally, Puyada et al., (2018) highlight that novice English teachers must be able to provide engaging and user-friendly resources to better support students in learning English.

Word cards are a form of instructional media that can be used in the learning process, especially to strengthen students' memory of vocabulary. According to Patau (2020), word cards are not only designed to facilitate vocabulary memorization, but also serve as an effective medium for repetition, which helps strengthen students' memory. The repeated use of word cards allows students to encounter the same vocabulary multiple times, making it easier for them to remember and recall the words when needed. As an instructional media, word cards serve as a concrete, attention-grabbing tool that provides meaningful practice opportunities, thereby supporting vocabulary retention and enhancing the overall learning process.

Several previous studies with similar analyses were reviewed to provide a

theoretical basis and strengthen the rationale for this research. The first research by Nashiroh & Ulfah (2024) found that teaching vocabulary in English using word cards is very effective for students. By using word cards, students will master vocabulary by playing and remembering the words that have been given. Then, The second research by conducted by Eka Agustina et al., (2023) that word cards serve as an effective learning tool for vocabulary acquisition because they encourage active recall, provide repeated exposure, and support long-term retention. Their ease of use, flexibility, and practicality make word cards a valuable tool for teachers and students alike in improving vocabulary mastery and overall language proficiency. Although the study involved useful findings, there are some limitations. Similar to the previous study, this study was conducted with relatively small sample measurements, involving only one or two classes. Therefore, these findings may not be fully realizable to the wider student population. Then, another conclusion of the study is too broad a cake, because it does not make vocabulary on a specific category of part of speech. This too broad focus can improve the results of the analysis on individual categories. While in this study, the study only uses 2 parts of speech noun and adjective specifically concrete noun and descriptive adjective. Bernard (2000: 51) explains that concrete nouns represent tangible entities, including things, substances, people and animals. For students, mastering these nouns is fundamental, as they serve as a basis for learning and understanding other types of vocabulary. Meanwhile, descriptive adjectives are used to describe qualities or characteristics of nouns or pronouns. They answer questions like "What does it look like?" and indicate aspects such as color, size, shape, age, feeling or texture.

Previous studies generally use Classroom Action Research (CAR) with the stages of preparation, action, observation, and reflection, so that more emphasis is placed on the improvement process of repeated learning in the classroom. Meanwhile, this study uses quasi-experimental design with pre-test and post-test to measure the increase in student vocabulary. This difference indicates the novelty of the study, since the learning outcomes can be analyzed quantitatively and statistically tested, thus providing empirical evidence regarding the effectiveness of the use of word cards media. However, in contrast to CAR, this study does not emphasize aspects of reflection and continuous improvement cycles.

Considering all of these factors, the researchers are interested in investigating the problems experienced by the students as described above using interesting media. The researchers used word cards as an engaging strategy that is expected to help solve the problem. Based on the problem above, the researchers formulate the research question as follows:

1. Is the use of word cards effective in increasing vocabulary of grade VIII students at SMP Negeri 3 Sausu ?
2. What is the effect of using word cards on students' vocabulary retention in the learning process?

METHOD

Research Design

The study employed a quantitative research, which was used to investigate the effectiveness of word cards as an instructional media in increasing students' vocabulary. This was chosen because it allowed the researcher to collect measurable data, apply statistical analysis, and draw objective conclusions regarding the role of instructional media in enhancing students' learning outcomes. This is in line with According to Creswell (2023), quantitative research is an approach used to test theories by measuring variables and analyzing them statistically. The results are numerical data, usually presented in tables or graphs, with the aim of testing and developing theories and hypotheses related to the phenomenon being studied.

In this quantitative study , Researchers employed a quasi-experimental design to examine the effectiveness of word cards as instructional media in increasing students'

vocabulary. The design allowed a comparison between the experimental and control groups, even though complete randomization of the participants could not be carried out. Vocabulary tests were administered to both groups before and after the treatment to generate scores that could be analyzed statistically. According to Sugiyono (2016), the quasi-experimental research method is a research method that has a control group, but cannot be used fully to control external variables that will affect the implementation of the experiment. By comparing the pre-test and post-test results, the researcher was able to determine whether there was a significant improvement in students' vocabulary. This approach ensured that the findings were based on objective, measurable data rather than personal interpretations. Quantitative research, combined with a quasi-experimental design, was chosen because it allows for clear, data-driven conclusions about the impact of using word cards on vocabulary learning in a real classroom setting.

Table 1. Scheme of Quasi-Experimental

Group	Pretest	Treatment	Posttest
B	O1	X	O2
A	O1	-	O2

Where:

B : Experimental Class

A : Control Class

O1 : Pretest

O2 : Posttest

X : Treatment

- : No treatment

Participants of the Study

One of the important steps in the research process is selecting a participants. This study was carried out at SMP Negeri 3 Sausu. The school had a total of 144 students, distributed across five classes: VII, VIIIA, VIIIB, IXA, and IXB. Based on the design used, researchers needed 2 classes from class VIII as participants. The researchers used total sampling in sample selection because the eighth grade only have 2 classes where the entire participants was used as a research sample without being excluded. Therefore, The researchers selected one class to serve as the control class and another as the experimental class. Based on the English teacher's information regarding vocabulary problems, the teacher recommended that the researchers choose class VIIIB as the control class and class VIIIA as the experimental class. as shown in the following table:

Table 2. The Number of Participants SMP Negeri 3 Sausu

Classes	Quasi experimental	Number of Students
VIIIB	Control class	20
VIIIA	Experimental class	21
Total		41

Instruments

Research instrument was tools used by researcher to collect the data needed in a study. Research instrument was very important because they could affect the validity of the data use in research. According to Sugiyono (2017:148), research instrument are tools used to measure observed natural and social phenomena, so that the data obtained will be more valid and reliable. In line with this, Arikunto (2006) emphasizes that instrument are tools that assist researchers in collecting data so that research is more systematic and focused. The instrument employed to collect data in this study was a test, which was designed to measure students' mastery of vocabulary.

The test consisted of both pretest and posttest items, allowing the researchers to assess students' abilities before and after the treatment. Brown (2004:3) states that tests are a systematic method for measuring a person's abilities in a particular domain. Tests are designed so that the results obtained can be used as indicators of a person's learning achievements. In this case, the researcher used a test containing 30 questions related to vocabulary. This test included a pretest and posttest to assess the extent of students' abilities before and after being given treatment using word cards.

Data Analysis Techniques

The data obtained from the pretest and posttest were analyzed quantitatively. The analysis involved using a formula to calculate the percentage scores of students and to determine the differences between the results of the two tests. This procedure allowed the researchers to evaluate the improvement in students' performance and to assess the effectiveness of the treatment applied. Therefore, Microsoft Excel was used to assist in processing the data, ensuring accurate and efficient calculations.

After all the data was obtained from the test results given to the students, the researcher analyzed them by adding up each individual's scores. This process is considered crucial in research because it allows the researcher to comprehensively assess and evaluate each student's performance. By using data from the pretest and posttest, the researcher was able to clearly observe the scores achieved by the students and compare their performance before and after the treatment. This analysis provides a more complete picture of the effectiveness of the methods implemented in this study. Therefore, the researcher used the formula from Arikunto (2006) as follows:

$$\Sigma = \frac{x}{N} \times 100$$

Where:

Σ = Standard score

X = Obtained score

N = Maximum score

100 = Fixed score

After that, the researcher calculated the average scores for the experimental and control groups based on the pretest and posttest results. Since this study used a quasi-experimental design, data from both groups was needed to see the difference in scores before and after the treatment. The average score (M_x) was obtained by adding up all student scores (Σx) and then dividing it by the total number of students (N), thus reflecting the performance of each group.

The next step, the researchers analyzed the deviation scores and sum of squares. They used a deviation formula after calculating the data. After the calculations were complete, they were able to observe and identify significant differences between the control and experimental classes. From this data, they were also able to assess whether the results had improved or decreased. For this reason, the researcher used the formula from Arikunto (2006) as follows:

$$\Sigma y^2 = \Sigma y^2 - \sqrt{\frac{\Sigma y^2}{N}}$$

$$\Sigma x^2 = \Sigma x^2 - \sqrt{\frac{\Sigma x^2}{N}}$$

Σx^2 = Deviation score of experimental group

Σy^2 = Deviation score of control group

N = Total number of students

In the final stage, researchers examine the collected information to find interesting

differences or evaluate theories using a t-test equation. This relates to the assumptions previously developed by the researcher. In this particular scenario, after all the numbers have been calculated, the specific equation is crucial for evaluating the hypothesis's results, determining whether it is validated or rejected. The following formula was stated by Arikunto (2006) as follows:

$$t = \frac{Mx - My}{\sqrt{\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2} \cdot \frac{1}{Nx} + \frac{1}{Ny}}}$$

Where :

Mx = Mean of experimental group

My = Mean of control group

$\sum x$ = Sum of square of experimental group

$\sum y$ = Sum of square of control group

Nx = Number of students of experimental group

Ny = Number of students of control group

RESULTS

Result of the Pretest

The pretest serves as an initial tool used by researchers to gather information regarding student abilities. This pretest was administered simultaneously to both groups, specifically the control and experimental classes, to ensure a fair comparison between their initial conditions. The primary purpose of administering the pretest was to determine students' vocabulary knowledge levels before any specific intervention was implemented. In this context, the experimental class would be given treatment involving word cards, while the control class would continue with standard teaching methods commonly used in schools. Thus, the results obtained from this pretest can serve as a basis for assessing how well the word cards performed when compared to conventional teaching approaches. In analyzing the data taken from the pretest, the researcher presents the pretest results of the control and experimental classes in detail in the following table:

Tabel 3. Students' Score of the Pretest

Pretest		
	Control class	Experimental class
Score	47.8	45.1
Mean	956.7	946.7
Students scoring <70	2	1
Students scoring >70	18	20
Highest score	80	83.3
Lowest score	30	26.7

Based on the pre-test data presented in the table above, it is clear that the pre-test results for both the control and experimental classes showed scores that were still in the lower range. The average score for the control class was 47.8, while the experimental class achieved an average of 45.1. Considering the school's minimum passing grade of 70, it is clear that both classes performed well below this benchmark. More specifically, only two students in the control class and one student in the experimental class managed to achieve the passing grade. Therefore, this scenario suggests that, prior to the implementation of the treatment, the baseline skill levels of individuals in both groups were relatively similar, allowing for a more objective assessment of the treatment's effectiveness.

Result of the Posttest

After an initial assessment of student abilities using a pretest, researchers implemented specific interventions for the experimental group, in accordance with the established research design. A posttest was then administered to measure student abilities and determine whether any improvement occurred as a result of the intervention. This final evaluation was conducted simultaneously for both the experimental and control classes. Posttest data was then analyzed using the same methods as the pretest, allowing researchers to compare results and assess the impact of the intervention. The researcher presents the posttest results of the control and experimental classes in detail in the following table:

Tabel 4. Students' Score of the Posttest

Posttest		
	Control class	Experimental class
Score	59.2	72.4
Mean	1183.33	1519.97
Students scoring <70	46.7	43.3
Students scoring >70	86.7	100
Highest score	4	13
Lowest score	16	8

The posttest results presented in the table above indicate a significant difference between the standard group and the group that underwent the experimental procedure. The control class obtained a score of 59.2. Although there was a slight improvement compared to the pre-assessment results, the average score for this group remained in the low to mid-range. In contrast, the posttest results for the experimental class showed substantial success, specifically a score of 72.4. A total of four students from the control class and thirteen students from the experimental class effectively met the minimum proficiency standard. Consequently, examination of the post-assessment results from both classes reinforces the notion that the treatment given to the experimental class efficiently improved their abilities more effectively than the control class that was not exposed to comparable methods.

Deviation and Square Deviation

After obtaining the average scores from the pretest and posttest for the experimental and control classes, the researchers proceeded to a more in-depth analysis by calculating the average deviation of each score and the square of that deviation. This calculation was performed to obtain an overview of the distribution of scores in each class, thereby determining the consistency of student performance. This analysis also helped researchers understand the variation in learning outcomes among students and assess the effectiveness of the treatment given to the experimental class compared to the control class. Furthermore, these calculations served to identify whether the differences in student achievement between the two groups were significant or merely occurred by chance. A detailed summary of the results from this calculation is presented in the following table:

Table 5. Deviation and Square Deviation of the Control Class

No	Initial	Student Scores		Deviation ($X_2 - X_1$)	Square Deviation ($X_2 - X_1$) ²
		Pretest (X_1)	Posttest (X_2)		
1	AA	63.3	76.7	13.4	179.56
2	AAQ	80	86.7	6.7	44.89
3	AF	50	60	10	100
4	AGB	46.7	73.3	26.6	707.56
5	AM	40	50	10	100
6	APD	46.7	56.7	10	100
7	AS	46.7	50	3.3	10.89
8	CLV	50	53.3	3.3	10.89
9	DMT	43.3	47	3.7	13.69
10	JF	36.7	47	10.3	106.09
11	JP	70	80	10	100
12	KAA	50	60	10	100
13	MNS	53.3	66.7	13.4	179.56
14	ML	46.7	60	13.3	176.89
15	NNS	43.3	56.7	13.4	179.56
16	PA	40	53.3	13.3	176.89
17	S	40	50	10	100
18	SA	30	60	30	900
19	SS	40	46.7	6.7	44.89
20	TD	40	50	10	100
Total		956.7	1184.1	227.4	3431.36
Mean		47.8	59.2	11.37	171.57

From the table presented above, it can be seen that the highest deviation score in the control class reached 26.6, indicating the largest difference between individual scores and the class average. Meanwhile, the highest squared deviation value of 707.56 reflects the large squared variation of the deviation of the scores. Furthermore, the total deviation in the control class was recorded at 227.4, which represents the sum of all deviations of individual scores from the class average. Meanwhile, the total squared deviation reached 3431.36, which is used to calculate advanced statistics such as variance and standard deviation. These figures provide an overview of the distribution of scores and the consistency of student performance in the control class, and serve as a basis for comparing performance with the experimental class.

Table 6. Deviation and Square Deviation of the Experimental Class

No	Initial	Student Scores		Deviation ($X_2 - X_1$)	Square Deviation ($X_2 - X_1$) ²
		Pretest (X_1)	Posttest (X_2)		
1	AP	53.3	73.3	20	400
2	BS	36.7	66.7	30	900
3	DGA	40	83.3	43.3	1874.89
4	DVP	46.7	70	23.3	542.89
5	FMK	53.3	90	36.7	1346.89
6	GW	43	80	37	1369.00
7	IMD	60	86.7	26.7	712.89
8	J	26.7	43.3	16.6	275.56
9	KPT	36.7	50	13.3	176.89
10	KS	56.7	86.7	30	900
11	MF	36.7	83.3	46.6	2171.56
12	MRA	36.7	56.7	20	400
13	N	30	53.3	23.3	542.89
14	NGA	46.7	73.3	26.6	707.56
15	NKK	33.3	63.3	30	900
16	NPA	50	70	20	400
17	RIB	83.3	100	16.7	278.89
18	SA	46.7	76.7	30	900
19	SAP	40	66.7	26.7	712.89
20	SZ	50	80	30	900
21	ZD	40	66.7	26.7	712.89
Total		946.5	1520	573.5	17125.69
Mean		45.1	72.4	27.30	815.51

After calculating the average deviation on the pretest and posttest of the experimental class, the next step researchers found that the experimental class had the highest deviation value (d) of 46.6 and the highest squared deviation (d²) of 2171.56. Furthermore, the sum of the deviation is 573.5 and the sum of the squared deviations is 17125.69. Therefore, it can be seen that the mean score deviation of the experimental group is higher than that of the control group. The experimental group's increase was 27.3 while the control group was 11.4. This is a fairly large number for comparison. Thus, before analyzing the data using the t-count formula, the researcher calculated the sum of the squares of the average score deviation of the experimental group and the control group as stated as follows:

a. Experimental Class $\sum x^2 = \sum x^2 - \frac{(\sum x)^2}{N}$ $\sum x^2 = 17125.69 - \frac{(573.5)^2}{21}$ $\sum x^2 = 17125.69 - \frac{328902.25}{21}$ $\sum x^2 = 17125.69 - 15662.01$ $\sum x^2 = 1463.68$	b. Control Class $\sum y^2 = \sum y^2 - \frac{(\sum y)^2}{N}$ $\sum y^2 = 3431.36 - \frac{(227.4)^2}{20}$ $\sum y^2 = 3431.36 - \frac{51710.76}{20}$ $\sum y^2 = 3431.36 - 2585.53$ $\sum y^2 = 845.83$
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Based on the data presented previously, the sum of squared deviations in the experimental class was recorded at 1463.68, while in the control class it was 845.83. These values indicate the large variation in student scores within each class, which serves as the basis for further statistical analysis. Next, the researcher calculated the t-test value with the aim of assessing whether there was a significant difference between student performance in the experimental and control classes. Researcher used a formula by Arikunto (2006) and it is:

$$t\text{-counted} = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right) \left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

$$t\text{-counted} = \frac{27.30 - 11.37}{\sqrt{\left(\frac{1463.68 + 845.83}{21 + 20 - 2}\right) \left(\frac{1}{21} + \frac{1}{20}\right)}}$$

$$t\text{-counted} = \frac{15.93}{\sqrt{\left(\frac{2309.5}{39}\right) (0.0976)}}$$

$$t\text{-counted} = \frac{15.93}{\sqrt{(59.22) (0.0976)}}$$

$$t\text{-counted} = \frac{15.93}{\sqrt{(5.78)}}$$

$$t\text{-counted} = \frac{15.93}{2.405}$$

$$t\text{-counted} = 6.62$$

The results of the calculated data analysis show that the t-value is 6.62. To determine whether there is a significant difference between the pretest and posttest results, the researcher compared the t-value with the t-table value at a significance level of 0.05 and degrees of freedom (df) = 41 - 2 = 39, which is 1.68. The results of this comparison show that the t-value is greater than the t-table, which indicates a significant increase in scores after the treatment was given. Thus, these data show that the use of media applied in the study has a positive influence on students' ability to master the material being tested. This calculated value is a strong basis for concluding that there is a significant change from the initial condition to the final condition in the learning process, so that the method used is proven effective in improving students' mastery of the material.

DISCUSSION

This research shows a notable variation in outcomes when comparing the group that didn't use word cards with the group that did, implying that employing word cards had a crucial effect on learning new words. The control group, which received instruction through conventional approaches, exhibited only minimal progress, with the mean score rising from 47.8 in the pretest to 59.2 in the posttest, resulting in a gain of 11.4 points (23.85%). In contrast, the experimental group, which received the word cards treatment, demonstrated remarkable progress. Starting from a much lower pretest average of 45.1, they achieved a posttest score of 72.4, a gain of 27.3 points (60.5%). This dramatic increase strongly

indicates that the use of word cards was highly effective in enhancing students' vocabulary mastery compared to the conventional approach.

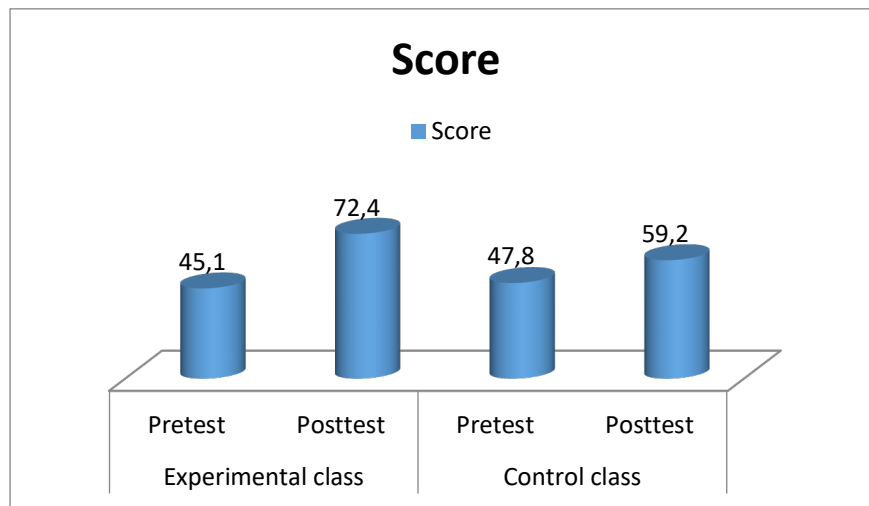


Figure 1. Comparison of Pre-test and Post-test Results between Control and Experimental Classes

Based on the research hypothesis, there are two criteria used for hypothesis testing. First, if the calculated t-value is greater than the t-table value, then the hypothesis is accepted, which means that word cards media is effective in improving students' vocabulary. Second, if the calculated t-value is equal to or lower than the t-table value, then the hypothesis is rejected, which means that word cards do not affect students' vocabulary improvement. In this study, the calculation results show that the calculated t-value of 6.62 is higher than the t-table value of 1.68. This indicates that the difference between the experimental class and the control class is significant. In other words, the null hypothesis (H_0), which states that word cards have no effect on vocabulary learning, is rejected. Conversely, the alternative hypothesis (H_a), which states that the use of word cards can improve students' vocabulary mastery, is accepted. Based on these findings, it can be concluded that word cards media have a positive and significant influence on students' ability to master vocabulary. Thus, it can be concluded that the use of word cards is effective in helping learners improve their vocabulary.

The findings of this study align with previous research highlighting the effectiveness of flashcards for vocabulary acquisition. Consistent with Nashiroh & Ulfah (2024), this study found that the use of flashcards significantly improved students' vocabulary comprehension. Students not only became proficient in understanding new words but also enhanced their overall learning experience. Likewise, Eka Agustina et al., (2023) word Cards are an effective tool for learning vocabulary because they help people actively remember words, remember repetitive exercises, and keep words in memory for a long time. Both previous studies used Class action research (CAR) consisting of preparation, evaluation, observation, and reflection, this study uses quasi-experimental design with pre-test and post-test to measure effectiveness more precisely. The main difference is that the previous study was limited to a broader type of vocabulary, while this study involved focusing on specific categories, namely concrete nouns and descriptive adjective so that the results are more targeted.

Further research is strongly recommended to be carried out with a wider scope, for example, involving more samples. This is important so that the research results can provide a more comprehensive picture and are not limited to one particular context. In addition to expanding the sample, future research could also be focused on testing the effectiveness of word cards in mastering other, more diverse but specific types of vocabulary . Not only

concrete vocabulary, but also abstract vocabulary, which is usually more difficult for students to understand, as well as other types of words such as verbs, adjectives or even adverbs. Thus, the results of the study will provide a more comprehensive understanding of the extent to which the word card media can be utilized in English learning. For teachers, the use of word cards can be a simple but effective alternative learning media. According to Fazriani et al. (2020), word cards serve as an engaging tool that motivates students to communicate and supports their English learning. The use of word cards in the learning process has been proven to have a positive and significant influence on students' ability to retain vocabulary and answer problem solving. This medium does not require large costs, is easy to make, and is flexible to use in various forms of classroom activities. Khodashenas et al. (2014) explain that word cards facilitate vocabulary learning by offering a straightforward, practical, and visually appealing method for presenting new words. This approach not only makes it easier for students to remember vocabulary but also encourages active participation and interaction during the learning process. Teachers can take advantage of word cards in group games, quizzes, paired activities, to creative writing activities. In this way, the learning process becomes not only more meaningful but also more enjoyable, so that students are more motivated to master new vocabulary and are able to retain it in long-term memory.

CONCLUSION

The results of this study indicate that the use of word cards media is effective in increasing students' vocabulary. This conclusion is supported by data analysis, which shows that the average posttest score in the experimental class was higher, namely 72.4, compared to the control class which reached 59.2. In addition, the calculated t-value of 6.62 exceeds the critical t-table value of 1.68, which indicates that the research hypothesis is accepted and the difference in vocabulary improvement between the experimental class and the control class is significant. Therefore, for classroom practice, the results of this study suggest that word cards can be applied as an interesting, inexpensive, and practical tool to support vocabulary learning. Teachers are encouraged to systematically integrate word cards into their lessons by asking students to repeat the vocabulary contained in the word cards. This kind of application can help students remember and repeat new words more effectively.

However, this study was limited small number of participants or sample, thus limiting the extent to which the findings can be generalized. In addition, limitations in this study arise because the words used during the treatment are limited to basic nouns and descriptive adjectives. Therefore, the researchers suggest that future research involve larger and more diverse samples, and include a wider range of vocabulary, including verbs, adverbs, pronouns, and other word categories. This will provide a more comprehensive understanding of how word cards function in various aspects of language learning. Overall, this study provides empirical evidence that word cards can significantly improve students' vocabulary acquisition.

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