

## USING FLASHCARDS TO INCREASE STUDENTS' VOCABULARY

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### ABSTRAK

*Tujuan dari penelitian ini adalah untuk mengetahui apakah penggunaan flashcards dapat meningkatkan kosakata siswa kelas VIII di SMPN 4 Tanantovea Donggala. Peneliti menggunakan desain eksperimen semu dengan dua kelas, kelas eksperimen terdiri dari 24 siswa dan kelas kontrol terdiri dari 20 siswa, kelas eksperimen dan kelas kontrol. Pengambilan sampel dilakukan melalui teknik total sampling. Dalam pengumpulan data, peneliti memberikan pretest dan posttest baik pada kelas eksperimen maupun kelas kontrol. Data dianalisis secara statistik untuk mengetahui perbedaan yang signifikan dari prestasi belajar siswa sebelum dan sesudah perlakuan. Dengan menggunakan taraf signifikansi 0,05 dan 42 derajat kebebasan (df), peneliti menemukan bahwa nilai t-tabel adalah 2,019, yang lebih rendah dari t hitung (4,65. Artinya hipotesis diterima. Dengan kata lain, penggunaan flashcards dapat meningkatkan kosakata siswa.*

**Kata Kunci:** kosa kata, kartu kata.

### ABSTRACT

The objective of this research is to find out if using flashcards can increase students' vocabulary of grade VIII students at SMPN 4 Tanantovea Donggala. The researcher used quasi-experimental design with two classes, experimental class consisted of 24 students and control class consisted of 20 students, experimental class and control class. The selected through total sampling technique. In collecting data, the researcher administered pretest and posttest to both the experimental class and control class. The data were analyzed statistically in order to find out the significant difference of students' achievement before and after treatments. Using 0.05 level of significance and 42 degree of freedom (df), the researcher found that the value of t-table was 2.019, which was lower than the of t-counted (4.65. It means that the hypothesis is accepted. In other words, using flashcards can increase students' vocabulary.

**Keywords:** Vocabulary, Flashcards.

## INTRODUCTION

Vocabulary is the basic language aspect that must be mastered before mastering English skills. Without having much vocabulary English language learners cannot express themselves well both in oral and written form. They will not get what speakers are saying when their vocabulary is not rich. Similarly, they cannot understand what they are reading if they do not have a lot of vocabulary. Erniwati, Mertosono, Arid and Anggreni (2021, p.382) state, "Vocabulary is crucial; it is the main tool for language learners to use the language effectively." In short, vocabulary is required in language skills development.

Vocabulary mastery is very important for every language learners. Undeniably, vocabulary affects the whole process of communication and learning. In the process of learning the English language, English language learners' chance of understanding or being understood depends on their vocabulary mastery. Thus, it is necessary to increase the vocabulary mastery as it is said that the more someone masters the vocabulary the better the chance he has in understanding or making themselves understood.

Vocabulary learning at schools especially junior high school is always integrated with language skills of listening, speaking, reading, and writing as well as the other language components such as grammar and pronunciation. It is stated in Curriculum 2013 that grade eight students are expected to be able to use nouns and adjectives related to people, animals, and things around the classroom, school, and house.

Unfortunately, the curriculum expectation has not been fulfilled yet. The result of interview with the English teacher of grade eight students of SMPN 4 Tanantovea Donggala in March 2021 indicated that most students lacked vocabulary. They found English uninteresting subject. They were not motivated to learn English. This is seemingly caused by the monotonous teaching method by which the students were assigned to memorize five words along with the meaning each meeting. The words were indeed closely related to the topic discussed. She never taught the vocabulary words; consequently, the students got bored with the teaching and learning activities.

Having interviewed the English teacher, the researcher randomly asked grade eight students some vocabulary words related to things around them. The result showed that most students could not identify the words. For example, of 20 words being asked they

could recognize five words only. This clearly indicated that the students' vocabulary size was poor.

In relation to the problems above, the researcher plans to apply a new strategy to help students with their vocabulary mastery. The strategy will use card, in this case flashcards as a medium of teaching. The flashcards are considered as interesting media that can be used to teach vocabulary to the junior high school students. The flashcards will make the students easy to learn, enjoy the activity and active in the learning process. It is also easy to create and to bring. Considering the benefits of using flashcards in teaching vocabulary, the researcher is expecting by using flashcards the students' vocabulary mastery can be increased, while at the same time they can enjoy the learning process.

## **METHOD**

In this research, the researchers applied quasi-experimental research design called nonequivalent control group design. She presents the design of the research as proposed by Arikunto (2013:87) as follows,

<b>E</b>	<b>O1</b>	<b>X</b>	<b>O2</b>
<b>F</b>	<b>O3</b>		<b>O4</b>

The population of this research was grade eight students of SMPN 4 Tanantovea distributed in two classes, class A and B. The class A consisted of 24 students, and class B consisted of 20 students. Therefore, total number of population was 44 students.

Sample refers to a smaller, manageable version of a larger group. "It is a small subgroup chosen from the larger population and it has the same characteristic to be investigated by the researcher" (Sugiyono, 2010, p. 118). Since grade eight students comprised of two classes while the researcher used quasi experimental with two classes, the sample was selected through purposive sampling called total population sampling. It means entire population was the samples of the research.

Technique of data collection is a way to get data to support the research. The technique used to collect the data in this research was paper-and-pencil method. The research instrument was a test. The test consisted of pretest and posttest. The researcher administered the pretest before applying the teaching treatment and the posttest was

given to the students after they got some teaching treatments. The pretest and posttest consisted of 25 items being classified into three parts; 10 items of multiple choice, 5 items of matching picture, 10 items of fill in the blank.

The researchers analyzed the data by using statistical analysis. It was used to analyze the test instrument result (pre-test and post-test). First, the researchers computed the individual score by using formula proposed by Arikunto (2013:308). Then, the researcher calculated the students' means score and compare pre-test and post-test mean score. To compute mean score of the students, the researchers applied the formula as proposed by Arikunto's (2013:315). After finding out their score, the researcher calculated the mean score of students in each test. Then researchers computed mean deviation between pre-test and post-test, she applied the formula proposed by Arikunto (2013:355), After computing the mean differences of pre-test and post-test, the researchers computed the sum of the square deviation using formula of Arikunto (2013:308), In order to know the significant difference between the mean of pre-test and post-test, the researcher used the formula suggested by Arikunto (2013: 354):

$$t = \frac{MX - MY}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right) \left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

## **RESULTS AND DISCUSSION**

### **RESULTS**

Data were collected for about a month. It began by administering the pretest to both the experimental and control class on November 17<sup>th</sup> 2021. Then, the classroom treatment was given to the experimental class twice a week started by November 18<sup>th</sup> to December 23<sup>th</sup>, 2021. Last, the posttest was administered to both classes on December 24<sup>th</sup> 2021. The students were tested before the treatment was given. This test is known as a pre-test. The result of pre-test was presented in the table 1 and 2:

**Table 1 Result Individual Score of the Experimental Class on Pretest**

NO	INDIVIDUAL SCORE
	PRE TEST
1	20
2	24
3	32
4	36
5	40
6	72
7	40
8	52
9	36
10	32
11	28
12	32
13	36
14	36
15	32
16	44
17	44
18	64
19	56
20	12
21	44
22	24
23	40
24	56
<b>Total Score</b>	<b>932</b>
<b>Mean Score</b>	<b>38.83</b>

The table shows the students' standard of the experimental class on pretest. While weight scores show the result individual score. The highest score in the experimental class was 72 and the lowest score was 12. Mean score pre-test of experimental class was 38.83.

**Table 2 Result Individual Score of the Control Class on Pretest**

NO	INDIVIDUAL SCORE
	PRE TEST
1	40
2	48
3	44
4	48
5	60
6	48
7	44
8	48
9	60
10	28
11	44
12	40
13	52
14	52
15	60
16	52
17	60
18	60
19	44
20	40
<b>Total Score</b>	<b>972</b>
<b>Mean Score</b>	<b>48.6</b>

The table shows the students' standard of the control class on pretest. While weight scores show the result individual score. The highest score in the control class was 60 and the lowest score was 28. Mean score pre-test of control class was 48.6.

After applying the treatment, the researchers gave post-test. The researchers gave a post-test to measure and find out the increase in students vocabulary. Moreover, we need to see whether the treatment that has been applied to the students can develop or not. The result of post-test is presented on the table 3 and 4:

**Table 3 Result Individual Score of the Experimental Class on Posttest**

No	Individual Score
	Posttest
1	80
2	88
3	76
4	68
5	72
6	80
7	72
8	92
9	84
10	72
11	88
12	80
13	72
14	76
15	76
16	64
17	64
18	80
19	64
20	60
21	92
22	72
23	68
24	76
Total Score	<b>1816</b>
Mean Score	<b>75.67</b>

Based on the above, it could be seen that most of students increased their score. The highest score of the experimental class on posttest was 92 and the lowest score class is 60. Mean score post-test of experimental class was 75.67.

**Table 4 Result Individual Score of the Control Class on Posttest**

No	Individual Score
	Posttest
1	60
2	76
3	68
4	64
5	64
6	64
7	60
8	68
9	72
10	72
11	76
12	76
13	64
14	60
15	64
16	60
17	72
18	76
19	52
20	60
<b>Total Score</b>	<b>1328</b>
<b>Mean Score</b>	<b>66.40</b>

The table 4 shows that the highest score of the control class on posttest was 76 and the lowest score class was 52. According to the calculations above, the students' mean score post-test of control class score was 66.40.

### **Result of Deviation**

The researchers wanted to know the distribution of the students' pre- and post-test scores after computing their learning achievement following the treatment. To get the result of the computation, the researchers obtained it through counting the deviation of pre-test and post-test as shown below. The researchers continued to count the mean deviation and square deviation after obtaining the pre-test and post-test mean scores. The researchers used the formula that she has stated in previous chapter. The result presented in the following table 5 and 6:



**Tabel 6 Result Deviation Score and Square Deviation of Experimental Class**

Test	Deviation Score	Square Deviation Score
Pre-Test & Post-Test	884	38224

**Tabel 6 Result Deviation Score and Square Deviation of Control Class**

Test	Deviation Score	Square Deviation Score
Pre-Test & Post-Test	356	8496

After analyzing the data of the test, the result of the data analysis showed that  $t_{\text{counted}}$  value was 4.65. The results of the data analysis showed that there was a significant difference between the pre-test and post-test mean score. By applying 0.05 level of significant with 42 degree of freedom (df) or  $24 + 20 - 2 = 42$ , the researcher found that  $t_{\text{counted}}$  (4.65) was higher than  $t_{\text{table}}$  (2.019). In brief, the study hypothesis was accepted. In other words, using flashcards positively affects the vocabulary.

## DISCUSSION

This research was started by the researcher's pre-assumption that vocabulary mastery of grade eight students at SMPN 4 Tanantovea Donggala is poor. For that reason, she proposed to teach the sampled students using flashcards. In other words, the goal of this study is to determine the impact of using flashcards on students' vocabulary mastery. To validate her presumption, a pretest was administered to both experimental and control class. The results demonstrated that of 44 students participate in the test, 98 percents of the participants were categorized 'poor' in terms of vocabulary mastery. However, after the students of the experimental class were taught using flashcards, their vocabulary mastery was increased significantly, left 25 percent of the 'poor category'. When being analyzed with  $t_{\text{test}}$  formula, it was also found that  $t_{\text{counted}}$  value was higher than  $t_{\text{table}}$  value.

The findings are in accordance with the research hypothesis stating that the achievement of grade eight students who are instructed using flashcards is significantly different from the achievement of those who receive regular instruction only. The success of using flashcards, especially picture flashcards in teaching vocabulary does

not apart from its nature. A combination of pictorial and textual annotations allows students to experience both linguistic and visual codes. Flashcards enables students to easily recall and memorize the words being learned. This is due to presentation of a word illustration may have learners create a mental sketch while domain specific mechanisms (visual) exist within the working memory. "Pictures can express meaning and are memorable, which would seem to make them suitable aids to learning" (Bates and Son, 2020, p.3). Thus, using flashcards help students retain vocabulary words in their long-term memory. The stored vocabulary subsequently boosts their performance in language learning.

Also, the findings justify the previous studies carried out by Rahmawati & Utami (2019); Wulandari (2017); Rejeki (2020); and Yulsardi & Ratmanida (2021) who reported that flashcards can increase vocabulary mastery of junior high school students. Flashcards is considered effective in improving students' vocabulary mastery for some reason. Komachali & Khodareza (2012, p.141) note, "Flashcards provides learners with opportunities to encounter vocabulary repeatedly." Besides, it allows students to understand the meaning of English words and their pronunciation (Milles & Ehri, 2017; Herlina & Dewi, 2017; Daulay, 2016). Furthermore, Flashcards may also be beneficial to learning because "they can increase the degree to which learners can experience target word meaning" (Bates and Son, 2020, p.3). In addition, this flashcard is representative of the utilization of the right brain and balances it with the left brain where it is very effective in improving a learner's ability in exploring new information and new vocabulary (Sitompul, 2013; Maryanto & Chrismastianto, 2018; Harisanty, Srirahayu, Kusumaningtiyas, Anugrah & Permata, 2020). Therefore, flashcards can be an alternative idea for teaching English vocabulary.

In spite of the benefits, using flashcards can be less useful when describing too complicated words and images as Bates and Son (2020, p.3) mention, "The use of pictorial forms in vocabulary teaching appears limited due to their inability to accurately express complicated word meanings and abstract words which represent more intangible concepts." The abstract words representing concepts and ideas involve more emotional associations based on affective experiences (Vigliocco, Kousta, Della Rossa, Vinson, Tettamanti, Devlin & Cappa, 2014) can be very difficult to be visually represented in flashcards because "not all words are picturable" (Nations, 2013, p.13).

Furthermore, this study is limited in timing of study. A short period of classroom treatment highly affects second language acquisition. When the learners get more exposure to the target language, they will learn more and faster to use the language (Krüger, 2018; Ellis, 2005). For that reason, it is necessary to have a long-term mediation so that students can perform better.

In addition, the findings of this study raise a number of opportunities for future research in English language teaching. The future research undoubtedly will refine and validate the concepts, and further elaborate the findings of this study. While this study focuses on statistical data that point to experimental study on the effectiveness of using flashcards in teaching vocabulary mastery, it can thus be extended in search of analytical one. For example, further research investigates about the impact of the lack of understanding to what the images represented due to the difference between the mother tongue and the target language. Thus, fellow scholars and readers can get more information about the flashcards, how to design and use flashcards in teaching vocabulary to EFL students of all ages and levels.

## **CONCLUSION**

Using flashcards can increase vocabulary mastery of grade eight students at SMPN 4 Tanantovea Donggala. It is proved by the t-counted value (4.65) which is greater than t-table value (2.019). The t-counted value is higher than the t-table value, as a result the research hypothesis is accepted. In other words, using flashcards positively affects the vocabulary mastery of grade eight students at SMPN 4 tanantovea Donggala.

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## REFERENCES

- Arikunto, S. 2013. *Dasar- Dasar Evaluasi Pendidikan (6<sup>th</sup> ed)*. Jakarta: Bumi Aksara.
- Bates, J., & Son, J.B. (2020). English Vocabulary Learning with Simplified Pictures. *TESL-EJ*, 24(3), 1-20.
- Erniwati, E., Mertosono, S. R., Arid, M., & Anggreni, A. (2021). Bilingual Approach: The Role of Flashcards in Teaching Vocabulary to Young Learners. *EXPOSURE: JURNAL PENDIDIKAN BAHASA INGGRIS*, 10(2), 381-389.
- Harisanty, D., Srirahayu, D., Kusumaningtiyas, T., Anugrah, E., & Permata I. (2020). The Utilization of Flashcards in Children Information Literacy Development. *Library Philosophy and Practice*, 1-12.
- Herlina, & Dewi, R. R. (2017). Flash card Media: The Media For Developing Students Understanding For English Vocabulary at Elementary School. *Indonesian Journal of Educational Review*, 4(1), 116–128.
- Komachali, M.E., & Khodareza, M. (2012). The Effect of Using Vocabulary Flashcard on Iranian Pre-University Students' Vocabulary Knowledge. *International Education Studies*, 5(3), 134-147.
- Krúger, M. (2018). Second Language Acquisition Effects of a Primary Physical Education Intervention: A pilot study with young refugees. *PloS ONE*, 13(9), 1-13
- Milles, K. P., & Ehri, L. C. (2017). Learning to Read Words on Flash cards: Effects of Sentence Contexts and Word Class in Native and Nonnative English-Speaking Kindergartners. *Early Childhood Research Quarterly*, 41, 103–113.
- Nation, I.S.P. (2013). *Learning Vocabulary in Another Language (2<sup>nd</sup> ed.)*. Cambridge, UK: Cambridge University Press.
- Rahmawati, C., & Utami, K.R. (2019). Improving Students' Vocabulary Mastery Using Flashcards. *PROJECT*, 2(6), 845-851.

- Rejeki, D.S. (2020). *Using Flashcards as a Learning Media to Teach English in an Islamic Junior High School*. [Unpublished undergraduate's thesis]. Islamic University of Indonesia, Yogyakarta, Indonesia.
- Sitompul, E.Y. (2013). Teaching Vocabulary Using Flashcards and Word List. *e-Journal on English Education*, 1(1), 52-58.
- Sugiyono. (2010). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung: CV. Alfabeta.
- Vigliocco, G., Kousta, S-T., Della Rosa, P. A., Vinson D. P., Tettamanti, M., Devlin, J. T., & Cappa, S. F. (2014). The neural representation of abstract words: The role of emotion. *Cerebral Cortex*, 24(7), 1767-1777.
- Wulandari, A.I. (2017). *The Use of Bilingual Flashcards in Teaching English Vocabulary: A Pre-Experimental Research at Grade Eight Students of MTs Mannilingi Bulo-Bulo Jeneponto*. [Unpublished undergraduate's thesis]. Muhammadiyah University of Makassar, Makassar, Indonesia.
- Yulsardi, R.P., & Ratmanida, R. (2021). The Effect of Digital Flashcard on Students' Vocabulary Mastery: An Experimental Research at SMPN 12 Padang. *Journal of English Language Teaching*, 10(3), 305-314.