

INCREASING STUDENTS' VOCABULARY BY USING ANKI-FLASHCARD (A STUDY CONDUCTED AT SMP BEREA TONDANO)

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Abstract: The purpose of this research is to find out whether using *Anki-flashcard* can increase students' vocabulary as a learning-teaching aid in learning English. The object of this research was grade 7th students consisted of 20 students at SMP Berea Tondano. This was quantitative research of pre-test and post-test with pre-experimental design. The data pre-test and post-test were collected using 20 items multiple-choice test. The results of this research indicate that there was a significant difference between the pre-test and post-test. The results of mean score showed improvement between the pre-test (53) and the post-test (90), with the post-test score higher than the pre-test. Therefore, it can be said that the use of the *Anki-Flashcard* was effective in increasing students' vocabulary. English teachers were suggested to use *Anki-Flashcard* in teaching and learning to help students remember words more easily.

Keywords: *Increasing, Vocabulary, Anki-Flashcard, Junior High School*

INTRODUCTION

Language is a tool used to express information in spoken and written form and is used as a communication tool (Liando et al, 2021). Everyone in the world use language to express their ideas and feelings to interact with others. As stated by (Rombepajung, 2019) "Language is a system of sound symbols that are meaningful and articulate (produced by spoken devices) that are arbitrary and conventional, which are used as a means of communication by a group of humans to give birth to feelings and thoughts." It means, without language it is hard to imagine how

people can interact to convey their thoughts. Through language, people can communicate and interact with others (Liando et al, 2021). Therefore, language is an important part of the study of a person's life that should be learned in human life.

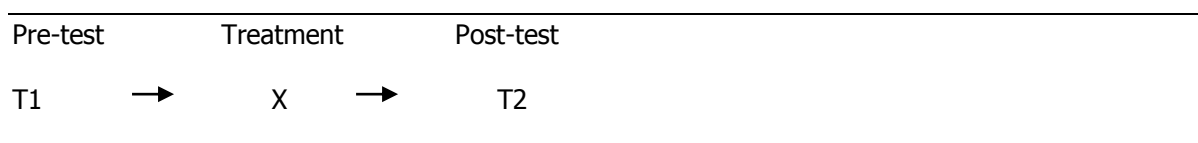
English is very important in our lives because English has been established in the language of the world. In Indonesia, English is regarded as the first foreign language to be taught in school from Elementary up to University Level (Liando et al, 2021). With the ability to speak English, making the students easier to master all the knowledge, because some science books have been written in English as an international language.

"There are four skills you need to master when learning English: listening, speaking, reading, and writing. But it will not work if you don't have enough vocabulary" As stated by (Pangaila, Muntuuntu & Rombepajung, 2021). Without vocabulary, it will be difficult to master and understand certain vocabulary words. Without mastering the vocabulary, it is not possible to master English well. As stated by (Wilkins, 1972) "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed". It means that the ability to speak that really requires the mastery of vocabulary. Based on the researcher's observation, the researcher asked the English teacher who was there about the students' problems in learning English. From the data given, in the English learning process students have difficulty understanding when the teacher explains the material given. From there, the researcher concluded that the students at SMP Berea Tondano cannot speak well because it limits the vocabulary they have. In listening and reading skills, students also have difficulty in what they heard and read. So, it can affect the final results of students' test scores.

Therefore, the teacher must increase the students' vocabulary. The researcher has to find the right technique to teach subjects in English. One interesting trick is to use Anki-flashcard. (Sitompul, 2013) found that students' vocabulary mastery increased after teaching flashcard and wordlist. But in this problem, the researcher tries to use Anki-flashcard media. The Anki-flashcard can be used to teach vocabulary to students. Based on the statement above, the researcher would like to do a research entitled "Increasing Students' Vocabulary by Using Anki-Flashcard".

RESEARCH METHODOLOGY

This research used in a pre-experimental study which is using quantitative research. This study used pre-test and post-test design. The post-test was the test given to the students after treatment or after teaching them by using Anki-flashcard. While pre-test is given before treatment begins, so there were two tests : T1 was pre-test and T2 was post-test, X used to symbolize the treatment. (Aliaga and Gunderson, 2002) have described using quantitative research methods very well.



Subject of The Research

This research conducted at SMP Berea Tondano. One class was selected as the subject of the experiment that was grade 7th students at SMP Berea Tondano. Pre-test and post-test vocabulary items were used in the data collection instruments. A test was used to acquire the information. The items exam in this research consists of 20 multiple-choice items. The test was set up using the materials provided. A total of 20 numbers were used in the pre-test and post-test. In each number had score 5 for every correct answer, therefore students who can fill up all of the answers correctly would get 100 scores as the highest scores. The lowest score was 0 for the students who could not fill up all of the answers.

The procedure in Applying Anki-Flashcard

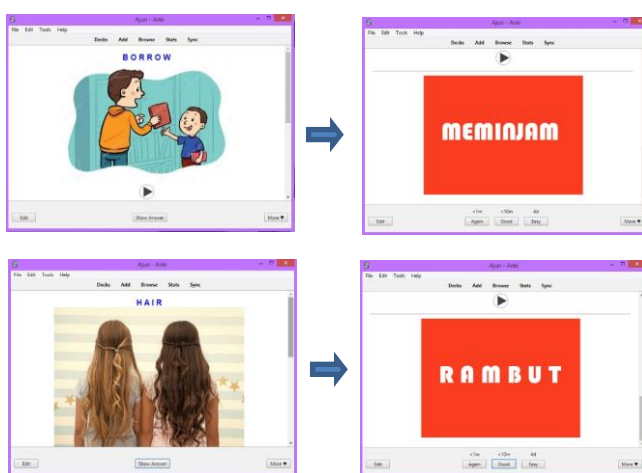
The procedure in applying Anki-Flashcard as follows:

- The researcher choses the material from book *When English Rings a Bell: Chapter VII I'm Proud of Indonesia (page 149-176)* and internet about Descriptive Text.
- The researcher explained the Generic Structure of Descriptive Text, the Purpose of Descriptive Text, and the Language Features of Descriptive Text in a brief manner that was taught to the students.

- The researcher collecting 20 vocabularies especially verb and noun from certain sources such as the internet that match to the material that was chose by the researcher. For example: *build, floor, climb, dome, call, hair, borrow, etc.*
- The researcher arranges the pretest and post-test items which were given to the students from various sources such as book, internet and other resources.
- The researcher gave pre-test to the students.

The researcher gave treatments to the student, the treatments were as follows:

- The researcher showed learning media that was made through Anki-Flashcard application used LCD TV. For example:



- The researcher showed one by one vocabularies on the deck. The deck contains 20 words.
- The researcher explained which words that used verb or noun.
- The researcher explained the meaning of words and how the words were spelled correctly and how they were pronounced it.
- The students studied the vocabulary through meanings, sounds and assess themselves on how well they knew the answers.
- The students reviewed what they heard to make sure they pronounced the words correctly.
- The researcher gave some oral questions to students one by one starting from the lowest score to the highest score from the pre-test results.
- The researcher asked the students which words were difficult and reviewed them together.

- The researcher conducted the post-test
- The researcher computed and compared the result of pre-test and post-test.
- The researcher concluded the result.

Data Analysis

The mean score of the pre-test was compared to the mean score of the post-test while assessing the data. The following formula was used to get the mean score:

Hatch and Farhady (1982) stated that:

$$X = \frac{\sum x}{N}$$

X : Mean score

$\sum x$: All score of the sample

N : Total number of students

RESULT AND DISCUSSION

The data collected were statistically analyzed using statistical analysis that was consisted of calculation of frequency distribution of scores, calculation of mean, and standard deviation of each test.

The obtained data from pre-test and post-test was collected using multiple-choice test which consisted of 20 items. Finally, the data were presented into the table below:

Table 1. The scores of students in pre-test (X), post-test (Y), and gain

| Students Number | Pre-test (X) | Post-test (Y) | Gain |
|-----------------|--------------|---------------|------|
| 1 | 60 | 90 | 30 |
| 2 | 40 | 85 | 45 |
| 3 | 35 | 80 | 45 |

| | | | |
|----|----|-----|----|
| 4 | 30 | 75 | 45 |
| 5 | 60 | 100 | 40 |
| 6 | 50 | 70 | 20 |
| 7 | 30 | 80 | 50 |
| 8 | 70 | 100 | 30 |
| 9 | 60 | 100 | 40 |
| 10 | 70 | 95 | 25 |
| 11 | 70 | 100 | 30 |
| 12 | 50 | 90 | 40 |
| 13 | 25 | 80 | 55 |
| 14 | 60 | 90 | 30 |
| 15 | 65 | 95 | 30 |
| 16 | 80 | 100 | 20 |
| 17 | 65 | 90 | 25 |
| 18 | 40 | 90 | 50 |
| 19 | 35 | 85 | 50 |
| 20 | 60 | 100 | 40 |

The table showed that the scorers of post-test were higher than those of the pre-test. From 20 students there was 1 student who gain highest than other students. The student number 13 who got increased by 55 points. It meant, there was significance achievement in post-test. There were 3 students got increased by 50, 3 students got increased by 45 points, 4 students got increased by 40 points, 5

students got increased by 30 points, 2 students got increased by 25 points, and 2 students got increased by 20 points.

Table 2: Frequency distribution of pre-test (X)

| Scores | Tally | Freq | Freq-% | Cum-Freq- | Cum-% |
|--------|-------------|------|--------|-----------|-------|
| 80 | <i>I</i> | 1 | 5% | 20 | 100% |
| 70 | <i>III</i> | 3 | 15% | 19 | 95% |
| 65 | <i>II</i> | 2 | 10% | 16 | 80% |
| 60 | <i>IIII</i> | 5 | 25% | 14 | 70% |
| 50 | <i>II</i> | 2 | 10% | 9 | 45% |
| 40 | <i>II</i> | 2 | 10% | 7 | 35% |
| 35 | <i>II</i> | 2 | 10% | 5 | 25% |
| 30 | <i>II</i> | 2 | 10% | 3 | 15% |
| 25 | <i>I</i> | 1 | 5% | 1 | 5% |

Note:

Freq- = Frequency

Cum-freq = Cumulative Frequency

Cum-% = Cumulative Percentage

As seen in table 2, the highest score was 80, and the lowest 25. Of 20 subjects who took the pre-test, 1 (or 5%) got 80, 3 (or 15%) got 70, 2 (or 10%) got 65, 5 (or 25%) got 60, 2 (or 10%) got 50, 2 (or 10%) got 40, 2 (or 10%) got 35, 2 (or 10%) got 30 and 1 (or 5%) got 25.

After calculating the frequency of pre-test scores, frequency distribution of post-test score was calculated. Table 3 shows the result.

Table 3: Frequency distribution matrix of post-test (Y)

| Scores | Tally | Freq | Freq-% | Cum-Freq- | Cum-% |
|--------|---------------|------|--------|-----------|-------|
| 100 | IIII I | 6 | 30% | 20 | 100% |
| 95 | II | 2 | 10% | 14 | 70% |
| 90 | IIII | 5 | 25% | 12 | 60% |
| 85 | II | 2 | 10% | 7 | 35% |
| 80 | III | 3 | 15% | 5 | 25% |
| 75 | I | 1 | 5% | 2 | 10% |
| 70 | I | 1 | 5% | 1 | 5% |

As seen in the table 3, the highest score was 100, and the lowest was 70. Of 20 subjects that took the post-test, 6 (or 30%) got 100, 2 (or 10%) got 95, 5 (or 25%) got 90, 2 (or 10%) got 85, 3 (or 15%) got 80, 1 (or 5%) got 75 and 1 (or 5%) got 70.

Table 4. Computation of Mean

To calculate the mean of the pre-test and post-test scores, firstly calculated the sums and sum square of both pre-test and post-test scores as seen in Table 4 below:

| Students Number | Pre-test (X) | X ² | Post-test (Y) | Y ² |
|-----------------|--------------|----------------|---------------|----------------|
| 1 | 60 | 3600 | 90 | 8100 |
| 2 | 40 | 1600 | 85 | 7225 |
| 3 | 35 | 1225 | 80 | 6400 |
| 4 | 30 | 900 | 75 | 5625 |
| 5 | 60 | 3600 | 100 | 10000 |
| 6 | 50 | 2500 | 70 | 4900 |
| 7 | 30 | 900 | 80 | 6400 |
| 8 | 70 | 4900 | 100 | 10000 |
| 9 | 60 | 3600 | 100 | 10000 |
| 10 | 70 | 4900 | 95 | 9025 |
| 11 | 70 | 4900 | 100 | 10000 |
| 12 | 50 | 2500 | 90 | 8100 |

| | | | | |
|------|------------------|---------------------|------------------|----------------------|
| 13 | 25 | 625 | 80 | 6400 |
| 14 | 60 | 3600 | 90 | 8100 |
| 15 | 65 | 4225 | 95 | 9025 |
| 16 | 80 | 6400 | 100 | 10000 |
| 17 | 65 | 4225 | 90 | 8100 |
| 18 | 40 | 1600 | 90 | 8100 |
| 19 | 35 | 1225 | 85 | 7225 |
| 20 | 60 | 3600 | 100 | 10000 |
| N=20 | $\Sigma X=1.055$ | $\Sigma X^2=60.625$ | $\Sigma Y=1.795$ | $\Sigma Y^2=162.725$ |

It is mentioned in Table 4, $N=20$, $\Sigma X=1.055$, $\Sigma X^2=60.625$, $\Sigma Y=1.790$, and $\Sigma Y^2=162.725$. Based on these result mean of pre-test and post-test scores were computed.

The mean of pre-test (X)

$$\bar{X} = \frac{\Sigma x}{N}$$

$$= \frac{1.055}{20} = 53$$

The mean of post-test (Y)

$$Y = \frac{1.795}{20} = 90$$

The pre-test mean was 53, while the post-test mean was 90. It may be concluded that the post-test mean was higher than the pre-test mean.

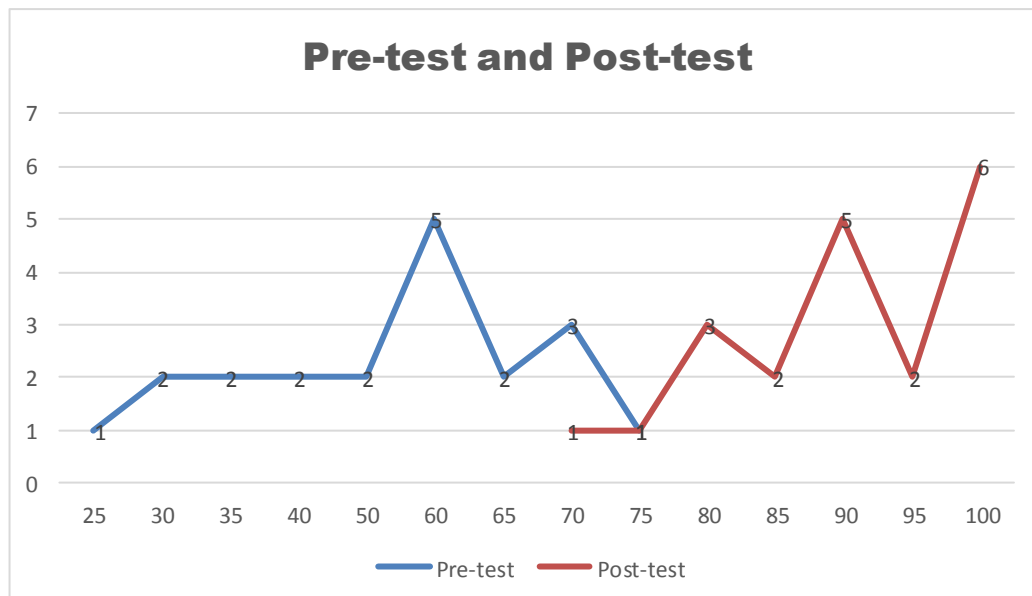


Figure 1. Frequency Distribution of Pre-test and Post-test Scores

DISCUSSION

Students of SMP Bera Tondano were still difficulty understanding when the teacher explains the material given, because they did not have enough vocabulary. With regard to the consideration of the problem of vocabulary mastery above, *Anki-flashcard* was chosen as a mediator in relation to the consideration of vocabulary mastery.

This application can be installed on a PC and mobile phone. From Anki-flashcard, students are guided to the translation and then understand the distinctive parts of speech, be it a verb or a noun. In the researcher experience, students still did not know whether a word in an analytical text is a verb or a noun. The author shows pictures and videos one by one. They translate the words on the *Anki-flashcard* and note whether they are verbs or present. *Anki-flashcard* is very important and interesting because it can greatly encourage students to memorize enough words and master vocabulary for a long time, because the *Anki-flashcard* is not only included in the images, but it can also be a video.

Based on the researcher's experiment to increase students' vocabulary with Anki-flashcard, students were highly motivated to guess the cards on the screen until they found the correct word. The researcher also did his best to defuse the situation in the classroom, dividing them into groups and showing them the cards one by one.

The collected data were then analyzed statistically by means of statistical analysis, which consisted of calculating the frequency distribution of scores and calculating the mean. The resulting pre-post-test data were collected using a 20-item multiple-choice test. The researcher gave 5 points for each correct number. Therefore, if students get 20 correct answers, they would receive 100 points for the highest score and zero points for students who fail to answer all numbers on the test.

Based on data analysis, it was found that the post-test (Y) was superior to the pre-test (X). In the pre-test, the best grades are given by score 80 and the lowest grades by students. In the post-test, the highest score of 100 was achieved by six students, and the lowest score of 70 by one student. Data analysis showed a significant difference when the mean score before the test was 53 and the mean score after the test was 90.

Based on the results of the study, the Anki-flashcard was able to expand the vocabulary of the students of SMP Bera Tondano. Anki-flashcard makes it easy for students to memorize vocabulary. The post-test score was higher than the pre-test score on average. This means that the use of Anki-flashcard as a means to increase students' vocabulary was effective.

CONCLUSION

Based on the data analysis, the researcher concluded that the Anki-flashcard could increase the vocabulary of the students of SMP Berea Tondano. Anki-flashcard makes it easy for students to memorize vocabulary. The mean after the post-test was higher pre-test ($Y > X = 90 > 53$). This means that the use of Anki-flashcard as a way to increase students' vocabulary is effective.

This study answers the question: Is the use of Anki-flashcard effective in increasing students' vocabulary? This tool is very effective in helping students memorize words and pictures. Therefore, we can conclude that this experiment was successful in improving students' performance in English vocabulary.

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