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THE USE OF MNEUMONIC TECHNIQUE IN TEACHING VOCABULARY MASTERY AT MTS AL-HUDA MUBUNG

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ABSTRACT

The aim of this study is to examine the use of Mnemonic techniques in teaching vocabulary mastery. This research was accomplished among seventh grade students of Mts Al-Huda Mubung in the 2021/2022 academic year. This study is a pre-experimental research design with pre-tests, treatments, and post-tests. Data is collected applying a multiple choice test. The research sample was taken from seventh grade students, which contain of 24 students. Research results show that the average score of students pre-test is 48.5 while post-test is 67.66. It appeared that the student's performance has improved after the treatment. In this study, the writer uses the t-table a (0.05) with degrees of freedom of 23 or 2069 while the result of the t-test is 27.46. This means that the t-test is higher than the t-table (10.33 > 2069). The resulting effect size (ES) is 1.85, which is classified as a strong effect. It appeared that the null hypothesis has been rejected and the alternative hypothesis is accepted. This also proves that the use of Mnemonic Technique effect eminently the students' vocabulary mastery.

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INTRODUCTION

Vocabulary take a main role in language learning. Without an adequate vocabulary, people cannot express their thoughts or communicate effectively verbally or in writing. Thornbury (2002) argues that without grammar little information can be communicated, with no vocabulary nothing can be communicated. For the teaching of the English language to be

successful, there are key terms that need to be understood. Some of them include the need for teaching materials that are appropriate for the beginner level, fully capable teachers who can impart the knowledge, and numerous other factors. Schmitt (2000) argues that vocabulary is a fundamental part of language that students need to master in order to communicate effectively and it is considered the best for other skills. At school, English is introduced and taught to students as another significant subject, which is one of the compulsory subjects. Though, English is still considered a complicated language and a challenging subject for students to master. This is one of the reasons why students find it difficult to learn a language without sufficient vocabulary.

In fact, teachers have taught their students in a certain way. For example, teachers teach students by listening to conversations and texts, using other books on English subjects from several sources, and translating English texts. There are a few problems for students in gaining knowledge of vocabulary which are: understanding meaning, remembering, spelling, and meaning. Teachers also ask students to do exercises and homework to increase their vocabulary. The teacher taught them well. However, some students still had problems and difficulties in acquiring vocabulary. Learning vocabulary is not easy for students, especially Indonesian students learning English as a foreign language. This is probably because English is not used in everyday communication. As a result, students' vocabulary remains low. This fact is unfortunate because vocabulary has always been considered as one of the most essential parts of learning a foreign language. Learning vocabulary may seem like one of the least things to learn a foreign language, but it can also be one of the most difficult. Therefore, educational activities for vocabulary classes should include activities for recognizing and implementing vocabulary. One of the most popular techniques that students can use to expand their vocabulary is the Mnemonic Technique.

In addition, the writer chooses mnemonic techniques to increase students' vocabulary because mnemonic technique is effective and easy to use. The word Mnemonic originates from the Greek word for Mnemosyne, the ancient Greek goddess of memory. It is supported by Amirusefi & Ketabi (2011) in their study of mnemonic instructions: a method to stimulate Vocabulary learning and recall. Memory has a decisive influence on the acquisition of capital later on. We can say that mnemonics are a technique we can use to increase our vocabulary by memorizing words. If we want to memorize new words, reading them once or twice and repeating them is not enough. We need to pay attention to them and create associations that our brain can easily recall when needed. The more the words we want to learn are related to what we already know, the easier it will be to remember those words. This is why using mnemonics is a powerful way to learn new vocabulary.

Mnemonic technique is a method to assist students remember information more easily and effectively. This technique can motivate students and lessons to make them more interesting and can also be used for learning English vocabulary. Students learn vocabulary easier and more fun. This technique is used to assist students remember new information. Implementing mnemonic techniques can help you remember more information. They can also learn and strengthen their vocabulary.

There were two research studies as the research gap in this research. According to research conducted by Risa S (2020). It was found that the application of Mnemonic Techniques can improve students' vocabulary. The previous studies also extend similar findings done by Marthila (2020). The writer found that the using mnemonic techniques was effective in teaching vocabulary mastery in the first semester of grade 7 SMPN 2 Baradatu in the 2019/2020 academic year.

As the research findings above shown that from the two previous studies research has been carried out with the same teaching technique and other way that they use to increase students' vocabulary mastery. That is all about Mnemonic technique are able to improve

students' vocabulary mastery. In this study, the writer focused on teaching vocabulary mastery by using Mnemonic Technique. This aims to determine the effectiveness of the use of mnemonic techniques in teaching vocabulary. The participants and where this research was taken also differ from previous researches. This study is a pre-experimental study design with pre-tests, treatments, and post-tests. Data was collected applying multiple choice tests. The research sample was taken from seventh grade students, which contain 24 students. Research results show that the average score of students pre-test is 48.5 whereas posttest is 67.66. It appeared that the student's performance has improved after the treatment. In this study, the writer uses the t-table α (0.05) with degrees of freedom of 23 or 2069 while the result of ttest is 27.46. This means that the t-test is greater than the t table ($10.33 > 2069$). The resulting effect size (ES) is 1.85 which is classified as a strong influence. It appeared that the null hypothesis is rejected and the alternative hypothesis is accepted. This also proves that the use of mnemonic technique effect eminently the students' mastering vocabulary.

RESEARCH METHOD

In conducting this study, the writer should be able to use appropriate method and the study design must be in accordance with the research conditions. This study applied pre-experimental research to examine the effectiveness of using mnemonic technique in teaching vocabulary mastery. The writer used a pre experimental that focuses on the research only on the students in one class. The study design is quantitative research because student success outcomes on the pretest and posttest are in the form of mathematical language, assessed respectively, and also understood using statistical procedure. In this context, quantitative data is based on the application of the T-test. As stated by Creswell (2012), quantitative research is the way for examining an objective theory by considering the correlation between variables.

This study used a pre-experimental, it entailed of a pre-test and a post-test. This study was categorized as a pre-experimental design due to the lack of control for outliers. The treatment was carried out after the pretest and posttest as in the following research design table:

Table 1. The Single Group Pre-test and Post-test

Experimental	Pre-test	Treatment	Post-test
Group	O ₁	X	O ₂

Adapted by: Scott, D. & Usher, R. (2011)

Emzir (2009) mention that a pre-experimental study is a situation in which at least one independent variable, called the experimental variable, is intentionally manipulated by the writer. Although Nawawi (2010) stated experiment method is a procedure conduct research to reveal the causal relationship of two variables or more by controlling the influence of other variables.

Arikunto (2019) quote that population is total of research subject. In addition, the population is all members of a well-described class of people, objects, or events. This study population is all of the 7th grade students class VII at Mts Al-Huda Mubung in academic year 2021/2022. The research sample is seventh grade students class VII totaling 24 students at Mts Al-Huda Mubung in academic year 2021/2022.

In this study, the writer applied measurement techniques to evaluate students' vocabulary mastery. Kothari (2004) states "the technique of measurement is the procedure of assigning numbers to observations or objects, measuring degree techniques are a function of the rules assigned to numbers ". This test is used in pre-test and post-test. To measure the

results of the pretest and posttest, the writer use statistical data. Next, the witer would present the student outcomes and the scale of the effect on treatment. The implementation of this study is through several steps as follow:

Pre-test

Pre-test was given to detect the student's difficulties in mastering the vocabulary before implementing the treatment.

Treatments

Once the pre-test has been indicated, the next step is to applying the treatments. The treatment is aimed at helping students improve their vocabulary.

Post-test

Post-test is the final step to conclude this study. The writer gave the students the same instructions as in the pretest. The writer used a test as a tool for data collection. In this study, the test was needed to assess the students' current vocabulary scores before and after the treatments. The test occupied in this study was a multiple choice test contained of 25 items. The questions are posed by the writer based on the specification table below:

Table 2. Table of Specification

Kind of Test	Aspect of Vocabulary	Kinds of Vocabulary	Number of Question
Multiple Choice	Meaning	Name of planet (Noun)	1,2,3,6,8,9,10,11,12,13,15,17,19,25
		Name of color (Noun)	4,5,7,14,16,18,20,21,22,23,24

Data analysis used the t-test to respond to the first research question and the effect size formula to respond to the second research question, applying the following formula:

- a. Score students' correct answers to the pretest and posttest

$$\text{Students' Score} = \frac{\text{The number of correct student answers}}{\text{Total number of items}} \times 100$$

Taken from Gay (2012)

- b. Formula 1: Formula of t-test:

$$t = \frac{\bar{D}}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N(N-1)}}$$

Legends:

\bar{D} = The interval of pre-test and post-test

t = Analysis of student significance value

$\sum D$ = Total sum of students' pre-test and post-test intervals

$\sum D^2$ = The sum of the students' squared interval scores from the pre-test and post-test

Taken from Ary et al (2010)

- b. Formula 2: Formula of the interval of pre-test and post-test

$$\bar{D} = \bar{X}_2 - \bar{X}_1$$

Legends:

\bar{D} = The interval of score of pretest and posttest

\bar{X}_2 = The students' average score of posttest

\bar{X}_1 = The students' average score of pretest

Taken from Petrick et al (2001)

c. Formula 3: Formula of average score of pre-test and post-test

$$\bar{X}_1 = \frac{\sum X_1}{N} \quad \bar{X}_2 = \frac{\sum X_2}{N}$$

Legends:

\bar{X}_1 = The average score pre-test of students' action

\bar{X}_2 = The average score post-test of students' action

$\sum X$ = the sum of score of students action

N = Number of students observed

d. Formula 4: Formula of effect size

$$ES = \frac{X_2 - X_1}{S}$$

Legends:

ES = Effect size

X_2 = Students' average score of post-test

X_1 = Students' average score of pre-test

S = Standard deviation of pretest and posttest

e. Formula 5: Formula of standard deviation

$$S_1 = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2}{N}}$$

$$S_2 = \sqrt{\frac{\sum (X_2 - \bar{X}_2)^2}{N}}$$

$$S = \sqrt{\frac{(N_1 - 1)S_1^2 + (N_2 - 1)S_2^2}{N_1 + N_2 - 2}}$$

Legends:

S_1 = Standard deviation of pre-test score

$\sum (X_1 - \bar{X}_1)^2$ = The sum of pre-test score minus the average score of pre-test

S = Standard deviation

N_1 = The number of students who participated the pre-test

N_2 = The number of students who participated in post-test

According to Mujis (2014), the outcome of effect size calculation could be classified into these following criteria.

Table 3. Criteria of the Effect Size

The Range of Effect Size	Categories of Effectiveness
ES > 0.5	Strong effect
ES 0.3-0.5	Moderate effect
ES 0.1-0.03	Modest effect
ES 0-0.1	Weak effect

To get the interpretation of the results pre-test and post-test, the writer use the criteria proposed by Harris and Graham (2007) as follows:

Table 4. Criteria of the Result of Pre-test and Post-test

Range	Qualification
0-49	Poor
50-59	Poor to Average
60-79	Average to Good
80-100	Good to Excellent

f. The criteria for testing the hypothesis include:

Table 5. Hypothesis Testing

Comparison	Hypothesis	
	H0	H1
t-test < t-table	Accepted	Reected
t-test >t-table	Rejected	Accepted

The table 5 means (1) the value of t-test is lower than the value of t table, so the alternative hypothesis is rejected, whereas null is accepted (2) the t-test value is greater than the t-table value, thus the alternative hypothesis is accepted whereas null is rejected.

RESEARCH FINDINGS AND DISCUSSIONS

Research Findings

After carrying out research in teaching vocabulary mastery using Mneumonic Technique to seventh grade students of Mts Al-Huda Mubung in academic year 2021/2022, the writer obtained significant data to strengthen this study. The result of this study was elaborated in research finding and hypothesis testing. The t-test was applied to response the first research question. To calculate the t-value, it needs \bar{D} . It was calculated from $\bar{X}_2 - \bar{X}_1$. ES requires Standart Deviation (S). To facilitate performance, calculations will be obtainable starting from the average pretest and posttest scores, the difference between the average pre-test and post-test scores, the t test, the standard deviation of student scores, and the relative size of the effect.

1. Pre-test average value

The student's pre-test mean was calculated as follows:

$$\bar{X}_1 = \frac{\sum X_1}{N} = \frac{1164}{24} = 48.5$$

The results presented that the student's pre-test average score was 48.5 and was rated as "poor to average".

2. The mean post-test scores of students are calculated as follows:

$$\bar{X}_2 = \frac{\sum X_2}{N} = \frac{1624}{24} = 67.66$$

The outcomes exposed that the students' mean pre-test score was 67.66 and was rated as "average to good".

3. The mean value of the students' pretest and posttest. The students' intermediate scores on the pre-test and posttest are computed as follows:

$$\begin{aligned} \bar{D} &= \bar{X}_2 - \bar{X}_1 \\ &= 67.66 - 48.5 \\ &= 19.16 \end{aligned}$$

Referring to the calculation results above, it is known that there is a difference between the mean scores of the students' pretest and posttest. The average posttest score is greater than the pretest average score.

4. T-test

The t-test formula is used to respond to the first research question. The calculations shown include:

$$t = \frac{\bar{D}}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N(N-1)}}$$

$$t = \frac{18.4}{\sqrt{\frac{8920 - \frac{(456)^2}{24}}{24(24-1)}}$$

$$t = \frac{18.4}{\sqrt{\frac{8920 - \frac{207936}{24}}{24(23)}}$$

$$t = \frac{18.4}{\sqrt{\frac{8920 - 8664}{552}}}$$

$$t = \frac{18.4}{\sqrt{\frac{256}{552}}}$$

$$t = \frac{18.4}{\sqrt{0.46}}$$

$$t = \frac{18.4}{0.67}$$

$$t = 27.46$$

Referring to the above calculation, it is attained that the t test result is 27.46 while the degrees of freedom N-1 (24-1) are significant at the 0.05 level. The writer finds that the t-value (27.46) is greater than the t-table (2069).

5. Standard Deviation of Student Scores

a. Standard deviation of pre-test

The computation of the pre-test standard deviation is explained as follows:

$$S_1 = \sqrt{\frac{\sum(X_1 - X_1)^2}{N}} = \sqrt{\frac{1077.82}{24}} = \sqrt{44.90} = 6.70$$

Referring to the calculation above, the standard deviation result is 6.70. The resulting standard deviation is the difference between the pre-test and post-test formulas.

b. Standard deviation of post-test

Standard deviation of the standard deviation pre-test is explained as follows:

$$S_2 = \sqrt{\frac{\sum(X_2 - X_2)^2}{N}} = \sqrt{\frac{1407.44}{24}} = \sqrt{58.64} = 7.65$$

Referring to the calculation results above, it is discovered that the standard deviation of the post-test is applied to establish the standard deviation between the pretest and posttest.

c. The whole of standard deviation

The standard deviation of the standard deviation pretest and posttest is explained as follows:

$$S = \sqrt{\frac{(N_1 - 1)S_1^2 + (N_2 - 1)S_2^2}{N_1 + N_2 - 2}}$$

$$S = \sqrt{\frac{(24) 43.03 + (24) 63.84}{24 + 24 - 2}}$$

$$= \sqrt{\frac{1032.72 + 1532.16}{24 + 24 - 2}}$$

$$= \sqrt{\frac{2564.88}{46}}$$

$$= \sqrt{106.87}$$

$$= 10.33$$

As calculated above, the outcome of the standard deviation between the pretest and post-test is 10.33. The resulting standard deviation is included in the Effect Size formula.

6. The Effect Size

The formula of effect size was applied to respond the second research question. The calculation is presented as follows:

$$ES = \frac{X_2 - X_1}{S} = \frac{67.66 - 48.5}{10.33} = 1.85$$

As the calculation above shows, the effect size is 1.85. Referring to the obtained result ($ES > 1.85$) is considered to be very strong effect size. One can conclude that Mneumonic Techniques strongly influences students' vocabulary mastery.

Hypothesis Testing

The t-test results are greater than t-table ($10.33 > 2069$), at a degree of freedom (df) = $N - 1$ ($24 - 1$) = 23 and 95% confidence ($p = 0.05$). This means that vocabulary teaching using Mneumonic Techniques to the 7th grade students of Mts Al-Huda Mubung in Academic Year 2021/2022 has significantly improved students' vocabulary achievement. Therefore, it proved that the alternative hypothesis (the use of Mneumonic Technique significantly influences the vocabulary teaching to 7th grade students by Mts Al-Huda Mubung in the academic year 2021/2022) was accepted and the null hypothesis (the use of Mneumonic Technique did not significantly affect the vocabulary teaching to 7th grade students by Mts Al-Huda Mubung in the academic year 2021/2022) was rejected.

Discussion

The writer finds that the reason students get low scores is because students do not understand what others say, their vocabulary is limited and students are bored with the teachers' English teaching methods, especially vocabulary teaching, but after the writer gave the materials on Mneumonic Technique. Students make improvements, they focus more on lessons and enthusiastically follow the material. They actively participate in asking questions to the teacher and do their job well. This is established by the percentage of the results pretest and posttest and some activities of students in the learning process for example students go to school diligently, students paid attentions to the lesson, students ask questions, students answer questions, students memorize vocabulary improves from pre-test is 48.5, improve 67.66 in post-test. It has been found that the Mneumonic Technique can improve students' performance in English learning, specially in vocabulary learning. The writer designed this research as a pre-experimental study. This study was carried out in the form of pre-tests, treatments and post-tests to overcome all students' vocabulary problems. The writer has applied the steps to class according to the lesson plans.

Referring to the findings of previous research Risa S (2020), it is known that the use of the Mneumonic Technique can increases students' vocabulary. The previous study also extend similiar findings done by Marthila (2020). It can be determined that the implementation of mneumonic techniques is efficient in teaching master vocabulary. The writer finds that there are a number of reasons why students get low scores because students do not understand what others say, the lack of understandable vocabulary, and sometimes the boredom felt by students with the teacher's English teaching techniques, pecially in teaching vocabulary. According to the writer's observations, students make more progress, they pay attention to the lesson and enthusiastically follow the lesson that the writer gives. Mneumonic technique is very good for improving students' vocabulary in learning English.

Considering the outcome of the study explained above, the writer accomplishes that mneumonic techniques offer certain advantages in vocabulary mastery. They are: (1) mneumonic techniques improve students' ability to remember new words; (2) mneumonic techniques to help students be more creative and innovative; (3) mneumonic techniques to help

students practice vocabulary; (4) mnemonic techniques that help students remember information; (5) the outcome of student's average score between pretest and posttest has improved better.

Referring to the outcome between the pretest and posttest in teaching vocabulary using the Mnemonic Technique, the writer concluded that Mnemonic Technique improved students' achievement in teaching vocabulary to the seventh grade students' of Mts Al-Huda Mubung in academic year 2021/2022. This means that the null hypothesis is rejected and the alternative hypothesis is accepted.

CONCLUSION AND SUGGESTION

Conclusion

Referring to the results and discussion of this study, Mnemonic Techniques have been helpful in improving students' vocabulary proficiency. This means that this technique can be a suitable technique for teaching vocabulary, specifically for inferring the meaning of unknown words. It is established by the outcomes of the T-test formula for testing of hypothesis. The average score pre-test is 48.5 and the average score posttest is 67.66. Consequently, the score of the interval is 19.16. As the results, strong effect size, effect size with $ES > 1.85$. This means that the use of mnemonic techniques has a significant influence on vocabulary teaching. The above results of data analysis and effect size have demonstrated that the use of mnemonic techniques is very effective in teaching vocabulary to seventh grade students by Mts Al-Huda Mubung. Therefore, the writer concludes that mnemonic techniques can solve the problems faced by students.

Suggestion

In accordance with the conclusions above, the researcher has made several suggestions regarding the results achieved:

1. For teachers, the teachers can employ Mnemonic technique in teaching to vocabulary mastery. In addition, in order to achieve better results in understanding students, teachers must ensure that the learning process is carried out respecting the pedagogical processes. Teachers should choose appropriate vocabulary teaching techniques to keep students interested in learning and avoid boredom. The results of this study will also improve a teacher's knowledge of Mnemonic Technique, therefore they can accomplish the learning process more effectively.
2. For students, the writer suggests taking extra lessons in or out of the classroom to improve vocabulary. They must also realize that mastering vocabulary is very important. In addition, Mnemonic Technique is effective to improve student's independence in learning vocabulary.
3. For other writers who will carry out research, it is recommended to use different technique and different types of vocabulary so that the learning process can be more effective in creating a meaningful learning experience. Hopefully, there will be any further research of how to complete this technique.

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