# THE EFFECT OF USING MNEMONIC STRATEGIES ON STUDENTS’ VOCABULARY ACHIEVEMENT AT SMPN 2 RAHA 

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#### Abstract

Most of the students felt difficult in learning a language because they had little vocabulary. It was caused by the students were easy forgetting new words they had learned. Therefore, this study was conducted to investigate whether there was any significant effect of using Mnemonic strategies on students' vocabulary achievements at the seventh grade students of SMPN 2 Raha. This research used quasi experimental design and the population was all seventh grade students of SMPN 2 Raha in academic year 2017/2018. The samples of this study were class $\mathrm{VII}^{11}$ as the experimental group and $\mathrm{VII}^{10}$ as the control group. The research instrument was using 40 questions of vocabulary test. To collect the data, the researcher gave pre-test, taught by Mnemonic strategies, and gave post-test. There were four techniques that applied in the learning process were rhyme, keyword, visualization, and narrative chain. The result showed students' mean score in experimental group was 53.54 and 74.71 at post-test, while mean score in control group was 57.27 and 68.75 in post-test. Based on the calculation of T -test, score of $\mathrm{t}_{\text {count }}=5.828$ was higher than $\mathrm{t}_{\text {table }}=2.00$ and the $\mathrm{p}_{\text {value }}=0.000$ was lower than $=0.05$. Therefore, could be concluded that there was a significant effect of using mnemonic strategies on students' vocabulary achievement at the seventh grade students of SMPN 2 Raha.


## 1. INTRODUCTION

Vocabulary is the critical part of a language. A language cannot be learned without vocabulary. Many students are difficult to memorize vocabulary and forget them easily. This problem is supported by Holden as cited in Marzban and Amoli (2012) who says that remember and recovery vocabulary are the hardest aspect in studying a foreign language, especially for EFL situation.

In this case, the researcher founds these conditions when doing observation at the seventh-grade students of SMP Negeri 2 Raha. The English teacher said that some students still have little vocabulary, so it makes the students are difficult to write and understand a sentence in English. It is caused by the students are easy to forget the new words that they have learned and difficult to remind these words. Indeed, the researcher interesting to apply mnemonic strategy to make the students easily memorizes new words and saves in their long term memory.

A study entitled improving students' English achievement through mnemonic for the fourth grade students of SDN 3 Karanganom Klaten in the first semester of the academic year of 2012/2013 had been done by Ayu Puspita Sari (2013). This study focused on all language skills are writing, reading, speaking, and listening. Therefore, the researcher tries to conduct a same research which focuses on vocabulary.

Based on the reasons above, the researcher is interested to conduct the study entitled "The Effect of Mnemonic Strategies on Students' Vocabulary Achievement at the Seventh-Grade Students of SMP Negeri 2 Raha".

Research Question
"Is there any significant effect of using mnemonic strategies on students' vocabulary achievement at the seventh grade students of SMP Negeri 2 Raha?"
2. LITERATURE REVIEW

Definition of Vocabulary
Hornby (1995) defines that vocabulary is the number of words in a language. Richard and Rodgers as cited in Untari (2016) believe that one of the most important aspects of foreign language is vocabulary. It can be said that vocabulary is the basic for learning a language and should be mastered for know the meaning
of a language. So, without vocabulary, people will be difficult to know a language.
Teaching of Vocabulary
Thornbury (2002) claims that critical part of learning a language is teaching vocabulary. It is because of impossible thing if learn a language without words. Walters (2004) argues that both of teacher and students approve that vocabulary achievement is the crucial element in language education. In short, choosing the appropriate technique in teaching vocabulary is not easy. Definition of Mnemonic Strategies

The word of Mnemonic derives from Greek word Mnemosyne which means "memory enhancing". According to Bakken and Simpson (2011), mnemonic is the technique for facilitating the learners in memorizing material or words become more simple and efficient. Cook (1996) explains that "mnemotechnics" is the technique that used by learners for remembering words by connecting vocabularies with absurd imageries or sounds in the L1 to develop L2 vocabularies. In other words, mnemonic strategies are the strategies to learn new words by associating new words with students' previous language.

The Principle of Mnemonic Strategies
According to Higbee (1996), there are five principles of mnemonic strategy are: meaningfulness, organization, association, visualization, attention and interest. Meaningfulness means that the material is more meaningful by encoding the information. Next, organization is the students divide the material in a simple form. Then, association is the students memorize words by connecting the new word with material that has learned before. Visualization is using imagination to remember the material. Last, attention and interest means that mnemonic strategy makes learning situation more enjoyable.

Types of Mnemonic Strategy

Mnemonic strategy has been classified into some types. Types of mnemonic strategy are:

1. Peg word method: Warseno and Kumorojati in Sari (2013) define that peg word method is memorizing number by modifying it into a specific thing related to the numbers.
2. Keyword method: Gairns and Redman (1986) conclude that key word method is associating target words with the word that pronounced similarly in the mother tongue, but not related with the meaning.
3. The loci method: Holden (1999) claims that loci method is memorizing new word by imagining the familiar place, and then associates with the new words.
4. Acrostics: Bakken and Simpson (2011) explain that acrostics are the sentence is created to help the students save the letters.
5. Acronyms: Putnam (2015) finds that acronym is making a new word based on the first letter of the words list.
6. Rhyme: Al-Zahrani and El-Hadidy (2011) state that in rhyming method, students use musical verses to remember the words.
7. Spatial Grouping: Holden (1999) says that spatial grouping is remembering new words by listing the words on the paper.
8. Finger method: Holden (1999) argues that finger method is learning vocabulary by imagining students' finger as the words.
9. Pictures: Thompson in Amiryousefi and Ketabi (2011) concludes that picture is a method to learn new words by relating the definition to the real picture.
10. Visualization: Holden (1999) states that visualization is imagining the picture, scene, place or situation which has strong connection with the words that will be memorized.
11. Grouping: Holden (1999) describes that in grouping method, students should divide the new words into the groups.
12. Narrative chain method: Thompson in Amiryousefi and Ketabi (2011) reveals that in this method, the students remember new words by connecting the words become a story.
13. Elaboration Method: Holden (1999) says elaboration method is the students relate the words with information that students already know.
14. Physical Response method: Thompson in Amiryousefi and Ketabi (2011) points out that physical response is the method to explain the meaning of words by changing the parts of students' body.
15. Physical Sensation Method: Oxford and Scarcella (1994) state that this method makes the students relate the words to a physical sensation.

Relevant Study
The first relevant study was conducted by Ayu Puspita Sari (2013) entitled improving students' English achievement through mnemonic for the fourth grade students of SDN 3 Karanganom Klaten in academic year of $2012 / 2013$. The findings were the improvement of cognitive aspect was the students knew the concept of making simple present tense. In affective aspect, the students were being excited, and enthusiastic in the learning process. Last, in psychomotor aspect, the students could answer the teacher's question based on the material.

The second relevant study was done by Nurul Miftakhul Janah (2015) entitled the implementation of using mnemonic devices to improve students' reading comprehension at the eighth grade students of MTsN 2 Simo Boyolali. The findings were the implementation of mnemonic devices in reading comprehension of
the eighth grade of MTsN 2 Simo Boyolali run well and the students' reading comprehension has improvement that proved by score of pre-test and post-test.

To avoid plagiarism, the researcher shows some differences of this study with the relevant studies. First, Ayu Puspita Sari (2013) applied mnemonic strategy which focused on all of language skill. Then, Nurul Miftakhul Janah (2015) applied mnemonic devices at eighth grade of MTsN 2 Simo Boyolali in the reading subject. It means that her research focused on reading comprehension while this research is done to know the effect of mnemonic strategies on students' vocabulary achievement at the seventh grade students of SMPN 2 Raha. Besides, this study also used experimental design while both of the relevant studies used classroom action research

## 3. RESEARCH METHODHOLOGY

The design of this study was quasi experimental design. It used two classes that were given pre-test, treatment and post-test. The population of this research was all seventh-grade students of SMPN 2 Raha in academic year 2017/2018. The total of population was 351 students. The samples of this study were class VII ${ }^{11}$ (31 students) as the experimental class and VII ${ }^{10}$ ( 32 students) as the control class. The instrument of this study was vocabulary test which consisted of 40 numbers of questions. The questions focused on multiple choices, matching, and jumble letters.

## 4. RESULT AND DISCUSSION

## Pre-test

1. Experimental Class

The distribution of students' pre-test score in experimental class was described below:

| Mark | Criteria | Frequency | Percentage |
| :---: | :---: | :---: | :---: |
| $86-100$ | Very High | 0 | $0 \%$ |
| $70-85$ | High | 5 | $16.13 \%$ |


| $56-69$ | Enough | 8 | $25.80 \%$ |
| :---: | :---: | :---: | :---: |
| $36-55$ | Low | 14 | $45.16 \%$ |
| $0-35$ | Very Low | 4 | $12.91 \%$ |
| Total |  | 31 | $100 \%$ |

The table above shows that there is no student ( $0 \%$ ) who gets "very high" scores (86-100). The students who get "high score" (70$85)$ are 5 students (16.13\%). There are 8 students or $25.80 \%$ who get "moderate" score (56-69). There are 14 students or $45.16 \%$ who get "low score" (36-55). And 4 students or $12.91 \%$ who get the very low score (0-35). Therefore, based on the students' score on pre-test at experimental class is dominated by low criteria

## 2. Control Class

The distribution of students' pre-test score in control class is described below:

| Mark | Criteria | Frequency | Percentage |
| :---: | :---: | :---: | :---: |
| $86-100$ | Very High | 1 | $3.13 \%$ |
| $70-85$ | High | 5 | $15.63 \%$ |
| $56-69$ | Enough | 10 | $31.24 \%$ |
| $36-55$ | Low | 14 | $43.75 \%$ |
| $0-35$ | Very Low | 2 | $6.25 \%$ |
| Total |  | 32 | $100 \%$ |

Based on table above, there is a student (3.13\%) who gets "very high" score (86-100). The students who get "high score" (70$85)$ are 5 students (15.63\%). There are 10 students ( $31.24 \%$ ) who get "moderate" score (56-69. There are 14 students (43.75\%) students who get "low score" (36-55). And there are 2 students who get "very low score" (0-35). Therefore, based on the students' score on pre-test at control class is dominated by low criteria which $43.75 \%$ students who have score among 36 to 55. Post-test

## 1. Experimental Class

The distribution of students' score of post-test in experimental class is presented in following table:

| Mark | Criteria | Frequency | Percentage |
| :---: | :---: | :---: | :---: |
| $86-100$ | Very High | 5 | $16.13 \%$ |
| $70-85$ | High | 15 | $48.38 \%$ |
| $56-69$ | Enough | 10 | $32.26 \%$ |
| $36-55$ | Low | 1 | $3.23 \%$ |
| $0-35$ | Very Low | 0 | $0 \%$ |
| Total |  | 31 | $100 \%$ |

Based on the table above, the classification of students' vocabulary achievement on post-test are: very high score (86-100) is achieved by 5 students or $16.13 \%$, high score ( $70-85$ ) is gotten by 15 students (48.38\%), enough score (56-69) is gotten by 10 students or $32.26 \%$, there is a student (32.23\%) who got low score (36-55), and there is no student who got very low score (0-35).

## 2. Control Class

The distribution of students' score of post-test in control class is presented below:

| Mark | Criteria | Frequency | Percentage |
| :---: | :---: | :---: | :---: |
| $86-100$ | Very High | 3 | $9.37 \%$ |
| $70-85$ | High | 12 | $37.5 \%$ |
| $56-69$ | Enough | 13 | $40.63 \%$ |
| $36-55$ | Low | 4 | $12.5 \%$ |
| $0-35$ | Very Low | 0 | $0 \%$ |
| Total |  | 32 | $100 \%$ |

The classification of students' vocabulary achievement on post-test are: there are 3 students ( $37.5 \%$ ) who achieved very high score (86-100), high score (70-85) is achieved by 12 students or $37.5 \%$, moderate score (56-69) is gotten by 13 students or $40.63 \%$, low score $(36-55)$ is raised by 4 students (12.5\%), and there is no students who achieve very low score (0-35). Therefore, there are thirteen students or $40.63 \%$ of students who get moderate score. Test of Homogenity
Test of Homogeneity of Variances

|  | Levene <br> Statistic | df1 | df2 | Sig. |
| :---: | :---: | :---: | :---: | :---: |
| Pretest | .133 |  | 1 | 61 |

The table above shows that the $\mathrm{p}_{\text {value }}$ is higher than 0.05 ( $0.717>0.05$ ). Therefore, it can be concluded that the sample variance in this study is homogeneous.

Normality Test

|  | Kolmogorov-Smirnova |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Statistic | Df |  | Sig. |
| Experimental | .077 |  | 62 |  |
| Control | .087 |  | 62 |  |

Based on the table above, the results of normality test at both of the classes were 0.2. It means that the data are getting from the sample that distribute normally ( $0.2>0.05$ ).
Hypothesis Testing
To determine whether there is a significant effect of using Mnemonic strategies on students' vocabulary achievement, the researcher uses Independent Sample t-test in SPSS 16 application.

| Summary of Hypothesis Testing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Df | t-test | Symbol | t-table | Result |
| 61 | 5.828 | $>$ | 2.00 | Ho: Rejected <br> $H_{1}:$ Accepted |

The table above shows that the t-test value is higher than $t$ table. It means that $\mathrm{H}_{0}$ is rejected and $\mathrm{H}_{1}$ is accepted. Therefore, we can conclude that there is a significant effect of using Mnemonic strategies on students' vocabulary achievement at the seventh grade students of SMP Negeri 2 Raha

## Effect Size

The effect size of Mnemonic strategies is categorized as a medium effect size which 0.59 as the result.


## Discussion

The result of this study finds that there is a significant effect of using mnemonic strategies on students' vocabulary achievements. It is supported by Amiryousefi and Ketabbi (2011) who said that mnemonic strategies were helpful strategy to improve and remember vocabulary.

The researcher applied four techniques in the learning process were rhyme, key word, visualization, and narrative chain. After being taught by using Mnemonic strategies, students' vocabulary achievement was better than before because the students memorize the words by doing some familiar activities like sing a song, make a story, imagine, and draw a picture.

Besides, this strategy also uses mental filling. So, when the students remember the association automatically will remember the words. Higbee (1996) claims that if the material more familiar or more related with students' previous knowledge, the material will be more stored in students' memory. Therefore, mnemonic strategy makes the students save the words in their long-term memory and easily to restore again.

Mnemonic strategies also make the students more enthusiastic and motivated in the learning process. They were very enthusiastic and concentrate when drew the visualization and made the association. It is supported by Groeger as cited in Amiryousefi and Ketabi (2011) who states that by using mnemonic strategies, students would easily remember new words, more motivated and the learning process were more interesting. In other words, besides easier remember the words, students also more motivated and enjoyed the learning process.

In control class, the researcher taught by regular teaching method where the students memorized the words in the worksheet.

The result is student' vocabulary achievement has not significant improvement. Students in control class control class are easy to forget the words because not supported by fun and interesting activity and also without repetition.

## 5. CONCLUSION AND RECOMMENDATION

Mnemonic strategies are one of strategies where the teacher tries to introduce how to remember vocabulary easily, save in students' long-term memory, and easily to restore. The students make the association by modifying a song, construct a sentence, imagine, and make a familiar story. Indirectly, if students remember the association they will also remember the words. At he end, the using of mnemonic strategy on improving students' vocabulary achievement is more effective than regular teaching method (non-mnemonic strategy). It's recommended that the English teacher to apply this strategies in teaching vocabulary.

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