THE EFFECT OF USING MNEMONIC METHOD ON STUDENTS' ACHIEVEMENT IN MASTERING VOCABULARY

SKRIPSI

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By

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ABSTRACT

Hayati Muslimah Simanjuntak : 1302050107 "The effect of Using Mnemonic Method on Students' Achievement in Mastering Vocabulary". Skripsi : English Education Program. Faculty of Teacher Training and Education University of Muhammadiyah Sumatera Utara.

The objective of the research was to find out the effect of Using Mnemonic Method on students' achievement in writing Mastering Vocabulary and to find out the students' difficulties in vocabulary by using group Mnemonic Method.

The mnemonic is a method to make it easier to remember something more specific terms, the mnemonic means to make a statement or expression, or connecting words, ideas, and fantasies. In other words mean mnemonic method for utilization of memory in certain ways.

The population of this research was VII grade students of SMP Muhammadiyah 58 Sukaramai, Medan. In Academic year 2016/2017, With total of population was 50 students. They were devided in to two groups: 25 students as experimental group and 25 students as control group. The experimental group was given treatment by group mentoring technique and control group using direct method. The instrument of the research is written test, which used pre test and post test. The result of this research showed that t- observe value was higher than t- table in which $t_{obs} > t_{table}$. (12,38 >2,02).The hypotesis was accepted. It means that there were a significant effect of using mnemonic method on students' achievement in vocabulary.

Keywrod: Mnemonic Method, Vocabulary.

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The researcher realizes that this skripsi is still far from being perfect. So, the researcher hopes suggestion and comments from all the readers or other researcher who want to study this study.

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The Researcher

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CHAPTER I

INTRODUCTION

A. Background of the Study

In teaching English, we need pay attention to many aspects. Some of them are: reading, listening, speaking and writing. But from all aspect, vocabulary is considered as the most important. Learning language will never be successful without learning and understanding the vocabulary. Have a good knowledge of vocabulary and can support students to mastery English.

Vocabulary is the fundamental part of language, which is used in any situation either. It is in the form of spoken and written language. Vocabulary is the one four language components, which are spelling, grammar, phonology and vocabulary. According to Heibert (2005 :3), "vocabulary is word come in two forms; oral and print . Oral vocabulary included those words that they recognize use in listening and speaking. Print vocabulary includes those words that they recognize use in reading and writing.

Vocabulary is extremely important in learning. Someone can convey his opinion, emotion, wish and understand to the listener with enough vocabulary. They also must know how to build vocabulary. Teacher has to make an effort to his/her students since students have more opportunity to identify the words during the teaching and learning process. But students can not remember vocabulary longer in their mind. They forget it easily. Storing the words in memory longer becomes a big problem for them. Besides, teacher also has a big role to keep motivating and trying various methods ways of teaching.

Based on the researcher experience in doing real teaching field (PPL), students had low vocabulary mastery. It was proved by their achievement and their mark. They were also difficult to remember the words, so they always had problem in learning English especially vocabulary. By looking at the background above, the researcher tries to teaching vocabulary by using mnemonic method in order to find a useful method in vocabulary that can increase students' achievement in vocabulary. Mnemonic memory method is a system of 'memory code" that makes people remember perfectly whatever they want to remember (Buzan, 2006:22).

B. The Identification of the Problem

The problems of this research were identified as follows :

1. Students have low mastery of vocabulary

2. Students are difficult to remember the words

3. Students are difficult to read and understand a text.

C. The Scope and Limitation

The scope of this research is vocabulary, and the limitation is focused on animal description to the Seventh grade students of SMP Muhammadiyah 58 Medan of the academic year 2017/2018.

D. Formulation of the problem

The formulation of this research was there any significant effect of using Mnemonics on the Students' Achievement in Mastering Vocabulary?

E. The Objective of the study

The objective of this research was to find out the effect of using Mnemonics on the students vocabulary mastery.

F. The Significant of the Study

The result of the study is expected to give contribution theoretically and practically.

1. Theoretical

    The results of this research are expected to be the in put to the teaching of english vocabulary.

2. Practical

    a. Teacher, as an input in the ways to teach vocabulary

    b. Students, to increase their ability in vocabulary.

    c. Other researcher, as the source of the information to do further research of the same problem.

CHAPTER II

REVIEW OF LITERATURE

A. Theoretical Framework

The theoretical framework aims to give concepts applied in this research. These concepts lead to a better analysis of the given theories, because they help the writer limit the scope of the problem. In this part, the researcher will explain about all of the theories used to strengthen the researcher.

1. Defining of Effect

Effect of teaching language is related to change of getting something into our cognitive system. The final result of effect in teaching is the improvement of ability. Ability is the result of learning process which involves teachers which ability. Slameto(2010:15) stated that improvement in learning is certain proof of succes or ability a student in doing their learning activities based in their level of class.

The improvement in which achieved by the students there are realized in the form of score so that it acknowledge the certain position of students in the class because the score they have reflect their improvement in the learning process.

Moreover, the effect of teaching treatment in languange learning according Buehl(2002:78) that related to the changes of getting something into our cognitive system. The final result of the effect in teaching is the improvement of ability. The

ability is the result of learning process which involves teachers with students which are reflected from knowledge the students have.

2. Method

Method is a way that is used to get the learning goal. In teaching learning process, method of teaching is needed by the teacher by using variation method have on the learning goal. As the teacher can not get the learning goal if the teacher do not have the variation method in teaching (Djaramah,1991:72).

When a teacher uses a method, it will make him or her easier to present the materials. Method also is one of education component, in additional to principles, aim curriculum material which perform basic educational function fundamentally. It is the teacher's responsibility to achieve their profession in using the method as well as possible.

3. Students achievement

Based on the C.Jack Richard Schmidt (2001:6) there are three aspects of achievement: affective,cognitive,psychomotor that could be connected to the purpose of learning causes the three dominants influence the students' point of view towards the material taught. Cognitive consist of knowledge, understanding,application,analysis,synthetic and evaluation; it means that students must had existed knowledge in their memories. Affective is the changed of behaviour that affects someone lies to do something, psychomotor is a skill to do something, ready to do it based on physic and emotion, self-control and become a

habit; students could write to an eassy by their own selves to know students' achievement the teacher do same test to students. Then, from the test, teacher could measure students progress or achievement.

Based on explanation above, it could be concluded that students' achievement is successfulness of the students in finishing or gaining something that they already learned in some educational experience and the teacher from their score can measure it.

4. Vocabulary

Vocabulary is one of importatant elements in learning of languange,because without vocabularies, we cannot understand enough to speak and make the communicaation with other if we don not supply the words in our conversation. "vocabulary knowledge is fundamental to read comprehension"

Vocabulary is one of languange component, which needed the learners to develop their skill. For the second languange learners,acquiring vocabulary take an imprortant role.

Meanwhile , according to Webster's vocabulary is:

(1) A list of word and phrase, abbreviation inflectional form etc. Usually arranged in alphabetical order defined or otherwise identified as in dictionary glossary.

(2) An interrelated group of noun-verbal symbol,sign,gestures,etc. Used for communication or expression in a particular art, skill etc.

(3)

4.1 Types of Vocabulary

According to John Hay craft in his book, at least threre are two types of vocabulary:

a. Active vocabulary, are the words that students understand and can pronounce it correctly and use constructively in speaking and writing.

b. Passive vocabulary, are the words that students recognize and understand when they occur in a context, but which cannot produce correctly him-self.

Meanwhile, fries as quoted by A.M Zaenuri says that vocabulary is of two namely; function and content words. The function words are a closed class, we cannot add to the preposition or auxiliaries or modals or any structure words of the languange. The content words can be added to at anytime as new scientific advances make new words and communication about new invention necessary.

4.2 Vocabulary Teaching

There are many strategies or techniques in teaching vocabulary that have been found by experts to find out the effectiveness of learning vocabulary, according to Ruth Gairn and Stuart Redman:

a. Visual technique including visual, blackboards, real objects, chart, picture files, flannel boards, pocket chart, flash card, word card, number card, magnetic board etc.

b. Verbal technique including the illustrative situation (oral or written), use of synonym and definition, contrast and opposites, scales and example of type.

As disscussed above that threre are many method in teaching vocabulary, According to Brownman, there are six methods in teaching vocabulary:

a. Mnemonic Keyword Method (encoding word)

b. Cognitive Strategy Instruction (semantic mapping)

c. Meaning of Word Parts (prefix instruction)

d. Vocabulary Practice Activies(flash cards, drills, pair quizzing and games)

e. The peg-word Method (rhyming words)

f. Computer Assisted Instruction (CAI) (video clips and other computer based media)

5. Mnemonic

Mnemonic(pronounced "ne-mo-nik") is a memory aid. The word "Mnemonic" comes from the Greek, the "Mnemosyne" (remembrance 'memory'), which means Goddess of Memory, Designation for the name of a mythological goddes of memory in Greek. So the question Mnemonic is memorizing something to help. Such assistance may be short, the presupposition with objects, or "linking" (remember things by association with something else), but Mnemonic is a method to remember information that is hard to remember back. There are three basic principles when using the mnemonic, the imagination association and location. By combining all three, you can use these principles to build a powerful system of mnemonic memory.

Based on these definition can be said that the mnemonic is a method to make it easier to remember something more specific terms, the mnemonic means do make a statement or expression, or connecting words, ideas, and fantasies. In other words mean mnemonic method for utilization of memory in certain ways.

From those reason, it can be concluded that a mnemonic is a technique or specific strategy that is used as "mental linking tool" or as "memory aiding" in memorizing and assimilating information. The teacher can use the mnemonic to guide their presentation about delivering materials so that the students can easily absorb the information from those presentation. Mnemonic has been a lot of tasted in various curriculum field and the students in all ages and all characteristic. Altough sometimes memorizing activies are seemed as boring activities, it is not fully true. It is because a mnemonic can be applicated to help the students in mastering interesting concepts so that mnemonic can also be learned happily.

5.1 Principles of Mnemonic

There are five principles of using mnemonic (Higbee 1977:78). They are meaningfulness, organization, association, visualization and attention and interest.

1) Meaningfulness

Mnemonic can make material meaningful by using ryhmes, patterns, and associations (Higbee,1997:78). The most powerful example is the phonetic system that gives meaning from the most abstract, meaningless and kinds of material number, So that the phonetic system will be easier to learn.

2) Organization

Mnemonic involves organizing material. The material can be systematically recorded and retrieved by the mnemonic (Higbee,1977:78). An example of finding a library book shows the advantage of organization.

3) Association

Association is a basic principle to all mnemonic (Higbee,1977:79). In associating items to each other, the link system is fits to this strategy. The loci,peg and phonetic system are easily remembered material as filling system. The use of filling system is by associating the new material that is wanted to learn with material that has been previously memorized.

4) Visualization

Visualization plays a central role in the mnemonic (Higbee,1977:79) it is because the associations are made visually. Visualization is probably the most unusual aspect of mnemonic and is also probably the most misunderstood. Not all mnemonic involve visual imagery. For example, to associate the words "cats" and "rats" the teacher could either from a mental picture of cats eating rats as a visual mediator, or the teacher could from a sentence, "Cats like to eat rats" as a verbal mediator.

5) Attention and interest

Mnemonic forces the students to concentrate on the material to form pictures and associate them. They tend to be interesting (Higbee,1977:79). It is because they make the material meaningful and involve visual imagery.

5.2 Use of Mnemonic in Vocabulary Teaching Learning-Process

Though students in junior high schools are usually not expected to learn and recall as many facts as older students, they are involved in a number of activities that involve making association that employ mnemonic principles. Teachers instruct students in the use of mnemonic method by using both visual and verbal clues.

In terms of vocabulary learning process itself, the use of mnemonic devices has fascinated some research, linguists and language teachers. Mnemonic devices have been considered as the most powerful and effective way to learn vocabulary. This conclusion is drawn from the result of studies trying to compare the effectiveness of mnemonic devices but there have not been other successful technique than mnemonic.

The key succes of mnemonic devices in vocabulary learning process is based on the explanation given by Waring (2004). Mnemonic devices always help language learners connect foreign words meaning with the familiar sound or image or information has been stored in memory. These strategies can be implemented through creating story or sentence, and associating it with a familiar image or association based on the iamge or song of new words presented to them.

The pattern of association which previous familiar stored information in long term memory also contributes easiness in vocabulary learning process.

It is because the associations have been familiar with the students so that they can easiliy memorize new words presented to them. In addition, the uniqueness of the pattern of association created with the use of mnemonic devices

will also make the memorial activity in vocabulary learning process become more interesting and memorable for students.

That is why mnemonic devices can be so effective in vocabulary learning process that students can use it to help them learn and memorize vocabulary input in their languange learning activity, In addition the use of these devices doesn't require a wealth of additional material or extensive planning and preparation make it suitable for all level of language learner's age.

5.3 Purpose of Mnemonic

The purpose of mnemonic method:

1) Facilitate people in remembering the knowledge behind as the name of place,person or any other date by connecting and association with an event or events that have to do around it.

2) Enabling people to take the knowledge that had long so that it can be remembered back at anytime required.

3) Streamline information from short-term memory into long-term memory in various ways contained there in.

5.4 Types of Mnemonic

Types of Mnemonic Devices or a tick of memory is a special way whichis made as a code for entering information items into mind system of students. There are many types of mnemonic device. However, there are six types the most popular of mnemonic device, They are: rhyme,acrostics,acronym,peg word system,method of loci,key word system.

1) Rhyme

A rhyme is a rhyme that is made by words and technical terms that must be remembered by the students (Syah,2005:162) . This rhyme can be better if it is given notes so that it can be sung. The songs of the junior high school students that contain of moral values can be used as an example of the arrangement of mnemonic rhyme.

A rhyme that is a musical characteristic is one feature that may be a salient factor that is easily recognized as helpful in musical application and also valuable in non musical applications (Scruggs and Mas tropieri in Shaeffer,2011:35)

Rhyme is a poem that consists of words and terms which have to be remembered by students. The poem will have a good effect if it given not can be sung.

By using familiar tunes as mnemonic devices can be an effective learning strategy that can help students of all abilities Walz and McLaughlin (2009:5).

2) Acrostic

Acrostic is sentences whose first letters represent to be remembered information, such as" My very educated mother just served us nine pizzas" to remember the nine planets in order (Mercury, Venus, Earth, Mars, Jupiter, Saturnus, Uranus, Neptunus and Pluto).

3) Acronym

An acronym is a word that is developed from the first letter of words that are to be remembered (Bakken and Simpson, 2011:80). An acronym is a word of which the letters represent individual components (Scruggs and Mastropieri in Shaeffer,2011:35)

There are some example of acronym. They are : the acronym of ROY G BIV to make the students remember the arrangement of colors in the rainbow, red, orange, yellow, green, blue, indigo and violet the acronym of HOMES to make the students remember the Great Lakes of Huron, Ontario, Michigan, Erie and Superior (Scruggs and Mastropieri in Shaeffer,2011:35).

There is another example of the acronym. It is the acronym of mejikuhibiniu can be used to help students remember the order of color in the rainbow (merah, jingga, kuning, hijau, biru, nila, ungu) (Warseno and Kumorojati, 2011:133-134).

4) Peg word method

A peg word method is a remembering number method by changing it into certain shaping objects that are similar with that numbers (Warseno and Kumorojati,2011:166). The example are: if the number is zero, the peg is ball; if the number is one, the peg is a pencil; and if the the number is three, the peg is a love leaf.

A peg word method is a method that relating unrelated items to be easily memorizable items which can act as pegs or hooks(Thompson,2011:179).

There are example of pegword method. They are: one is bun or john, two is shoe and three is tree.

Peg-word system is a mnemonic technique which uses the components that have been mastered before. The components are formatted in pair, such as; merah-saga, panas-api, langit-bumi, etc. The words is used to remember words which have same character such as; blood, lipstick, hell etc.

5) loci method

It is a mnemonic strategy which uses the special and famous places as a way to put words or terms which have to be remembered by students. Word loci itself is plural form of " Locus" that has meaning place. In this case, the names of famous cities, building and street can be used for placing word and term that relevant in meaning has a similarity in character or situation. For example, the capital city of USA can be used for remembering the first president of that country(George Washington)

Method of loci is a mnemonic device that uses certain places and are well-known as means of certain words and technical term placement that must be remembered by the students (Syah,2005: 162). A loci method is the oldest mnemonic (Thompson,2011:179).

By this method, the students can memorize things complete with the ordered number. Loci must be in a location that is easy to remember, because it will be used to the next steps(Warseno and Kumorojati,2011:121). The examples of method of loci are: The parts of

body here are used for loci number 1 until 10, they are: head, eyes, nose, mouth, ears, neck, breast, stomach, foot and hand.

6) The key word method

The keyword method is a system like words lists that contains of the ittems: foreign languange words, keywords that at least the words in foreign language and in mother tongue has the same sounds either in the first syllable or the last syllable, and the meaning words from the foreign language words (Syah,2005:162) There are example of keyword such as to remember the name of "Darwin" the students can use a keyword of "dark wind" by adding visual drawing of the wind that has black color, and to remember the name of "Maryland" the students can use a keyword "Marriage and a land" by adding visual drawing of marriage and a land (Loorayne and Lukas in Joyce, weil and Calhoun, 2009:238).

5.5 Advantages And Disadvantages of Mnemonic Method

A. Advantages

1) Mnemonic method can help the students catch the material that has been taught the teachers.

2) Mnemonic method can help the students memorize lessons easily and effectively

3) Mnemonic method can help the students learn and memorize the course material easier.

B. Disadvantages

1) Preparation and planning learning program requires a fairly long time.

2) Learners cannot interact and communicate directly with teachers, such as asking for explanation are poorly understood.

3) Modules arranged centrally so likely materials presented less relevant to the needs of learners, like language is difficult to understand is less clear in illustrates.

5.6 Procedures Of Using Mnemonic Method

Joyce (2009:223) in book of Models Of Teaching, the book reveals steps that can improve memory in mnnemonic the phase-stages:

Phase one   : Prepare materials

Attending to the material Use technique of underlining listing reflecting

Phase two   : Developping connections

CHAPTER III

METHOD OF RESEARCH

A. Location and Time

The research was conducted at SMP Muhammadiyah 58 Sukaramai, Medan. The reason for choosing this school because based on the researcher was observation in practice teaching program that there was a problem with the students ability in the school especially in learning vocabulary.

B. Population and Sample

1. The population

The population of this research the VII class students academic years 2017/2018 of SMP Muhammadiyah 58 Medan. They were two parallel classes consists of VII^A (25 students) and VII^B (25 students). So the population consist of 50 students

2. The sample

Total sampling was applied in this research in which all population of these were two classes were taken as the sample or it applied total sampling. The sample of this research were 50 students as show in the following table

Table 3.1
Total Population and Sample

No	Class	Population	sample
1	VII^A	25	25
2	VII^B	25	25

C.Research Design

The experimental research was used to carry out this research. It dealt with quantitative research. This research was experimental research with different groups, experimental group that consists of 25 students and control group with 25 students. The experimental group recieved treatment using Mnemonic method, while the control group was taught by using Direct method. Both groups got the same from test in the pre test and post test. The design was apllied in order to investigate the effect of using mnemonic method on the students' achievement in mastering vocabulary.

Table 3.2
Research Design

No	Class	Group	Pre-test	Treatment	Post-test
1	VII^A	Experimental group	✓	Mnemonic Method	✓
2	VII^B	Control Group	✓	Direct Method	✓

1. Pre-test

Both of group would be given the pre-test would be conducted to find out the students' achievement in vocabulary before having treatment. The pre-test was identification test. In this case, the researcher took the test from the students' book.

2. Treatment

The procedure of research in control group and experimental

Table 3.3
Procedure of Teaching in Experimental Group

No	Teacher's Activities	Student's Activities
1	Teacher gave greeting the students to open class.	Students answered greeting from their teacher as respond to the teacher.
2	Teacher checked the attendance list.	Students in the call raised their hands.
3	Teacher split the group, there were 25 students who would be divided into 5 groups : 5 groups consisted of 5 students	Students began searching for the appropriate groups in asking the teacher
4	Teacher asked the students to sit in accordance groups.	Students sat in accordance groups
5	Teacher gave pre-test and ask the students	Students did the pre-test and answer the question.
6	Teacher gave 10-15 minutes to do the pre-test	Students did together with the group
7	Teacher asked the students to collect pre-test	Students collected pre-test
8	Teacher gave treatment using Mnemonics method	Students attended class in accordance with the treatment that is given teacher
9	Teacher gave post-test and ask the students to answer the question based on the pictures.	Students did the post-test and answer the question based on the picture
10	Teacher calculated the score of their test.	Students submitted their work.

Table 3.4
Procedure of Teaching Control Group

No	Teacher's Activities	Student's Activities
1	Teacher gave greeting the students to open class.	Students answered greeting from their teacher as respond to the teacher.
2	Teacher checked the attendance list.	Students in the call raised their hands.
3	Teacher gave pre-test and ask the students	Students did the pre-test and answer the question.
4	Teacher gave 10-15 minutes to do the pre-test	Students did together with the group
5	Teacher asked the students to collect pre-test	Students collected pre-test
6	Teacher gave treatment using conventional method	Students attended class in accordance with the treatment that was given teacher
7	Teacher gave post-test and ask the students to answer the question based on the pictures.	Students did the post-test and answer the question based on the picture
8	Teacher calculated the score	Students submitted their work

3. Post- test

Post-test would be given to the students after having a treatment. The researcher gave the same test in the pre test and post test. The post-test was the final test in this research, especially in measuring the treatment whether it was significant or not, it meant to know whether the treatment gave the effect or not on the students' achievement in vocabulary.

D. Instrument of the Research

In collecting the data the following instruments was used a test. The instrument or tool to measured reverse current bahaviour, or performance of a person. The instrument of collecting data in this research was consisted of multiple choice.

E. The technique for Analyzing Data

In analyzing data, descriptive quantitative technique will be applied to analyze the data. The quantitative data will be found by computing the score of the students' score, the steps are:

1. Identifying the students' answer

2. Scoring the students' answer for value of the test

$$\text{Score} = \frac{total\ of\ true\ answer}{total\ of\ the\ question} \times 100\%$$

3. Listing the score into tables, first for the experimental group scores and second for the control group scores

4. Calculating the total score pre-test and post-test in experimental group and control group.

5. Finding the mean of the score of pre-test and post-test in experimental group (X) and control group (Y) by using formula:

   a. Mean of variable X by using formula:

   $$M_x = \frac{\sum fx}{n} \text{ (Sudijono,2014 P.84)}$$

   b. Mean of variable Y

   $$M_y = \frac{\sum fy}{n}$$

6. Finding the standard deviation of variable X and Y by using fx^2 formula:

    a.Standard deviation of variable X

$$SDx = \sqrt{\frac{\sum fx2}{n}}$$

    b.Standard deviation of variable Y

$$SD_y = \sqrt{\frac{\sum fy2}{n}}$$

    c.Standard error mean variable 1

$$SD\ m1\ or\ SD\ m1 = \frac{sd1}{\sqrt{N1-1}}\ (Sudijono, 2014.P.283)$$

    d.Standard error mean variable 2

$$SD\ m2\ or\ SD\ m2 = \frac{sd2}{\sqrt{n2-1}}$$

    e.the difference of standard error between variable 1 and mean variable 2

$$SE_{M1\text{-}M2} = \sqrt{SE\ M12 + SEM12}\ (Sudijono, 2012:316)$$

7.Testing hypothesis by applying test

$$t_o = \frac{M1-M2}{SEM1-M2}\ (Sudijono, 2014.P.304)$$

Notes:
M_x = Means for variable 1 or X

M_y = Mean for variable 2 or Y

$\sum fx$ = Total multiplication of frequency and students' score

$\sum fy$ = Total multiplication of frequency and students' score

n =Number of cases

SD_x = Standard deviation for variable x

SD_y = Standard deviation for variable y

$\sum fx2$ = The square of total multiplication of frequency and students' score

9. Giving the interpretation to "t_o" using formula:

$Df = (N_1 + N_2) - 2$ (Sudijono, 2014. P.322)

Df = Degree of freedom

N = number of cases

It was used to know wether the experimental group get the result significancy after apply the technique.

F. Statistical Hypothesis

In this research, statistical hypothesis was used to describe whether the hypothesis was accepted or rejected. The statistical hypothesis formula:

Ha: $T_{observe} > T_{table}$

Ho: $T_{observe} < T_{table}$

Ha : There is the effect of using Mnemonic method on students' achievement in mastering vocabulary(the hypothesis is accepted)

Ho : There is no effect of using Mnemonic method on students' achievement in mastering vocabulary(the hypothesis is rejected)

CHAPTER IV

DATA COLLECTION AND DATA ANALYSIS

A. Data Collection

The Data of this research were obtained from the test score. There were two kinds of test for experimental group, pre-test and pos-test. The following were students' score on the pre-test and post-test of the experimental group. That was the result of the pre-test and post-test in experimental group in table 4.1

Table 4.1
The Result of Pre-test and Post-test of the Experimental Group

No	Students Initial	Pre-test (X1)	Post-test(X2)
1	AH	50	75
2	AA	45	65
3	ADS	60	90
4	ARS	55	90
5	AN	60	95
6	ARP	50	80
7	AAM	65	85
8	APA	60	95
9	AS	50	70
10	AZ	60	85
11	CPS	75	95
12	DA	55	90
13	DNV	65	95
14	GAS	60	80
15	ZN	55	80
16	KAM	50	80
17	LA	55	85
18	MAA	60	90
19	MDH	55	85
20	MF	50	80
21	MRS	55	90
22	MR	50	95
23	NR	55	95
24	PA	65	95
25	PH	55	90
Total		1415	2155

The data in table 4.1 showed that the higher score pre-test in experimental group was 75 and the lowest was 45.The higher score post-test in experimental group was 95 and the lowest score in experimental group was 65.

Table 4.2
The result of pre-test and post-test of the control group

No	Students Initial	Pre-test(Y1)	Post-test(Y2)
1	AR	40	55
2	AAF	50	60
3	APA	60	70
4	CPS	50	65
5	DA	65	80
6	FR	45	65
7	GNH	60	75
8	KLF	55	70
9	MIS	50	60
10	MR	65	75
11	MRC	70	85
12	MDH	50	70
13	MR	70	85
14	MA	55	65
15	ND	60	70
16	NR	50	70
17	NI	50	70
18	NA	50	70
19	PJ	50	70
20	PPM	55	70
21	RM	50	65
22	RH	55	75
23	RA	50	70
24	SBG	60	75
25	SR	50	70
Total		1365	1755

The higher score pre-test in control group was 70 and the lowest was 40. The higher score post-test in control group was 85 and the lowest score in control group was 55.

B. The Data Analysis

Based on the table 4.1 and 4.2 the following table were the differences score between pre-test and post-test in both experimental and control group.

Table 4.3
The differences between pre-test and post-test of the Experimental Group

No	Students Initial	Pre-test (X1)	Post-test(X2)	$X(X_2 - X_1)$
1	AH	50	75	25
2	AA	45	65	20
3	ADS	60	90	30
4	ARS	55	90	35
5	AN	60	95	35
6	ARP	50	80	30
7	AAM	65	85	20
8	APA	60	95	35
9	AS	50	70	20
10	AZ	60	85	25
11	CPS	75	95	20
12	DA	55	90	35
13	DNV	65	95	30
14	GAS	60	80	20
15	ZN	55	80	25
16	KAM	50	80	30
17	LA	55	85	30
18	MAA	60	90	30
19	MDH	55	85	30
20	MF	50	80	30
21	MRS	55	90	35
22	MR	50	95	45
23	NR	55	95	40
24	PA	65	95	30
25	PH	55	90	35
Total		1415	2155	740

Based on the table 4.3 the mean score of Experimental group were calculating as the following: $M_x = \frac{\Sigma x}{n}$

$= \frac{740}{25}$

=29,6

Which:

M_x : the mean score of experimental group

$\sum_x$: the score of $X_1 - X_2$

Table 4.4
The differences between Pre-test and Post-test of the Control Group

No	Students' Initial	Pre-test (Y_1)	Post-test(Y_2)	Y($Y_2 - Y_1$)
1	AR	40	55	15
2	AAF	50	60	10
3	APA	60	70	10
4	CPS	50	65	15
5	DA	65	80	15
6	FR	45	65	20
7	GNH	60	75	15
8	KLF	55	70	15
9	MIS	50	60	10
10	MR	65	75	10
11	MRC	70	85	15
12	MDH	50	70	20
13	MR	70	85	15
14	MA	55	65	10
15	ND	60	70	10
16	NR	50	70	20
17	NI	50	70	20
18	NA	50	70	20
19	PJ	50	70	20
20	PPM	55	70	15
21	RM	50	65	15
22	RH	55	75	20
23	RA	50	70	20
24	SBG	60	75	15
25	SR	50	70	20
Total		1365	1755	390

Based on the table 4.4 the mean score of control group were calculating as the

following:

$$M_y = \frac{\sum y}{n}$$

$$= \frac{390}{25}$$

$$= 15{,}6$$

Which:

M_y : the mean score of control group

$\sum_y$: the score of $Y_2 - Y_1$

N : Sample of control group

Based on the mean score of both sample group, the following table for calculating

the correlation score in both group

Table 4.5
The calculation of Mean and Standard Deviation Score of Experimental
Group

No	Students' Initial	(X) $x_2 - x_1$	X- M_x	$(X-M_x)^2$
1	AH	25	-4,6	21,16
2	AA	20	-9,6	92,16
3	ADS	30	0,4	0,16
4	ARS	35	5,4	29,16
5	AN	35	5,4	29,16
6	ARP	30	0,4	0,16
7	AAM	20	-9,6	92,16
8	APA	35	5,4	29,16
9	AS	20	-9,6	92,16
10	AZ	25	-4,6	21,16
11	CPS	20	-9,6	92,16
12	DA	35	5,4	29,16
13	DNV	30	0,4	0,16
14	GAS	20	-9,6	92,16
15	ZN	25	-4,6	21,16
16	KAM	30	0,4	0,16
17	LA	30	0,4	0,16
18	MAA	30	0,4	0,16
19	MDH	30	0,4	0,16
20	MF	30	0,4	0,16

No	Students' Initial			
21	MRS	35	5,4	29,16
22	MR	45	15,4	237.16
23	NR	40	10,4	108,16
24	PA	30	0,4	0,16
25	PH	35	5,4	29,16
Total				404,48

Table 4.6
The calculation of Mean and Standard Deviation Score of Control Group

No	Students' Initial	$Y(y_2-y_1)$	$Y-M_y$	$(Y-M_y)^2$
1	AR	15	-0,6	0,36
2	AAF	10	-5,6	31,36
3	APA	10	-5,6	31,36
4	CPS	15	-0,6	0,36
5	DA	15	-0,6	0,36
6	FR	20	4,4	19,36
7	GNH	15	-0,6	0,36
8	KLF	15	-0,6	0,36
9	MIS	10	-5,6	31,36
10	MR	10	-5,6	31,36
11	MRC	15	-0,6	0,36
12	MDH	20	4,4	19,36
13	MR	15	-0,6	0,36
14	MA	10	-5,6	31,36
15	ND	10	-5,6	31,36
16	NR	20	4,4	19,36
17	NI	20	4,4	19,36
18	NA	20	4,4	19,36
19	PJ	20	4,4	19,36
20	PPM	15	-0,6	0,36
21	RM	15	-0,6	0,36
22	RH	20	4,4	19,36
23	RA	20	4,4	19,36
24	SBG	15	-0,6	0,36
25	SR	20	4,4	19,36
Total				365,64

Based on the calculation of the table X and Y the following formula was
implemented to find out the critical value of both group as the basic to the test the
hypothesis of this research

1. $SD_x = \sqrt{\dfrac{\sum x2}{n}}$

$= \sqrt{\dfrac{404,48}{25}}$

$= \sqrt{16,19}$

$= 4,02$

$SE_{M1} = \dfrac{SDX}{\sqrt{N1-1}}$

$= \dfrac{4,02}{\sqrt{25-1}}$

$= \dfrac{4,02}{\sqrt{24}}$

$= \dfrac{4,02}{4,89}$

$= 0,82$

SD variable Y

$SD_y = \sqrt{\dfrac{\sum y2}{n}}$

$= \sqrt{\dfrac{365,64}{25}}$

$= \sqrt{14,62}$

$= 3,82$

$SE_{M2} = \dfrac{SDY}{\sqrt{NI-1}}$

$= \dfrac{3,82}{\sqrt{25-1}}$

$= \dfrac{3,82}{\sqrt{24}}$

$= \dfrac{3,82}{4,89}$

$= 0,78$

The conclusion above show the following facts

$SD_x = 4,02$

$SD_y = 3,82$

$N_1 = 25$

$M_x = 29,6$

$M_y = 15,6$

Next the following formula was implemented to find out the error of the standard

deviation between M_x and M_y

$$SE_{M1\text{-}M2} = \sqrt{SE\ M12 + SEM22}$$

$$= \sqrt{(0,82)2 + (0,78)2}$$

$$= \sqrt{0,6724 + 0,6084}$$

$$= \sqrt{1,2808}$$

$$= 1,13$$

The result above was applied to the test hypothesis

$$T_o = \frac{M1 - M2}{SEM1 - M2}$$

$$= \frac{29,6 - 15,6}{1,13}$$

$$= \frac{14}{1,13}$$

$$= 12,38$$

After the data above were calculated by using t-test formula, it was found that the result

that t- observed was 12,38. Then after seeking in the table of distribution of t-observed as

the basic of counting critical in certain of the degree of freedom(df) the calculation

showed that df were:

$Df = N_1 + N_2 -2$

$= 25+25-2$

48 (in the line of, showed that t_{table} was)

From the result above, it showed that final $t_o = 12{,}38$ and the number of value of the $t_{table} =$

So the researcher found that $t_{observed} > t_{table}$ or $12{,}38 > 2{,}02$

So, it means that H_o was rejected and H_a was accepted. There was significant effect of using Mnemonic method on the students achievement in mastering vocabulary.

C. Statistical Hypothesis

In this research statistical hypothesis would be used to decide whether the hypothesis would be accepted or rejected. The statistical hypothesis formula:

$H_o : t_{observed} < t_{table}$

$H_a : t_{observed} > t_{table}$

H_o: there is no significance effect of using Mnemonic method on the students' achievement in mastering vocabaulary.

H_a : there is a significance effect of using Mnemonic method on the students' achievement in mastering vocabulary.

D. Finding

Testing the hypothesis should be done in order to know whether the hypothesis was accepted or rejected. In testing hypothesis, it was decided that hypothesis accepted if $t_{observed} > t_{table}$ and hypothesis is rejected if $t_{observed} < t_{table}$.

Based on the calculation, the result of t_{test} was t_{obs} (12,38) and t_{table} (2,02) in the hypothesis testing. It was shown that the alternative hypothesis was accepted because t_{obs} higher than $t_{table.}$ It means that Mnemonic method gave significant in mastering vocabulary. It was prove from the data showing that score experimental group was increased by using Mnemonic Method.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclussion

Based on the data analysis above, the researcher found that there was a significant effect of using Mnemonic method on the students' achievement in mastering vocabulary, found that the $t_{observed} > t_{table}$ or 12,38 >. The result of students' score who were taught by applying Mnemonic method was higher than those who were taught without Mnemonic method become more effective,interactive and easier to the students.

B. Suggestion

Realated to the conclusion above, some suggestion were put forward as the following:

1. The english teacher can use this method to applying in learning vocabulary process for the students at the same level when learning english in the class

2. The teachers have to know how to stimulate students' curiosity and must be able to present the lesson so that it was more interested and relevant for the students. One of the method that can use is Mnemonic method.

3. It is suggestion to other researcher use this finding sourcher of the research.

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