

## **CHAPTER IV**

### **RESEARCH FINDING AND DISSCUSSION**

In this chapter the researcher describes teaching and learning process, data presentation, data analysis, hypothesis testing and discussion.

#### **A. Research Finding**

##### **1. Teaching and Learning Process**

###### **a) Pre- Treatment**

Pre test was given to the students before they got a treatment. The researcher observed the condition of the students' vocabulary achievement by using pretest this is gives to know the basic competence for all students and to know their earlier knowledge before they get treatment by using random picture technique in vocabulary learning. The result of pretest showed that their vocabularies were still poor. The students were difficult and confused to know the meaning of the word.

###### **b) Treatment**

After getting the result of pretest, the researcher gave treatment to all students. The researcher conducted treatment in the classroom. The treatment used here was using random picture technique. It helped the students in improving their vocabulary achievement. when teaching and learning process by using random picture was done, the students feel very happy, enthusiastic and enjoy to learn

English especially vocabulary. Although the technique was very simple, but the students fell interested in learning vocabulary.

c) post treatment

After doing treatment, the researcher gave posttest to all students. It was given in order to know the scores of the students after they were taught by using random picture technique. The researcher wanted to know how far the students understand and remember about some vocabularies that given when treatment process was done. Probably, the result of the test showed that the student' vocabulary achievement improves significantly.

## 2. Data Presentation

As mentioned previously, the researcher wants to know significant different score between students before and after taught by random picture technique.

The result of test is presented as follow:

- a) the students' achievement in vocabulary before being taught by using random picture technique can be seen in the table below:

**Table 4.1**

**The students' achievement in vocabulary before being taught by using random picture**

**Method (Pretest)**

No	Name	Score
1	C A	44
2	M D A	54
3	A P	60
4	A J	47
5	A M	74
6	D D P	64
7	F N F	80
8	F N	70
9	R F M	57
10	K K N	67
11	M F S	77
12	R F	47
13	R S	57
14	N M C	67

The numbers of the test is gives 20 questions for 14 students. The pretest was done before treatment process (teaching vocabulary by using random picture), this test is gives to know the basic competence for all students and to know their earlier knowledge before they get treatment.

b) the students' achievement in vocabulary after being taught by using random picture (Posttest)

The result of the students' achievement in vocabulary after being taught by using random picture can be seen in the table below:

**Table 4.2**

**The student' achievement in vocabulary after being taught by using random picture**

**Method (Posttest)**

No	Name	Score
1	C A	84
2	M D A	84
3	A P	94
4	A J	90
5	A M	97
6	D D P	90
7	F N F.	97
8	F N	100
9	R F M	94
10	K K N	90
11	M F S	97
12	R F	87
13	R S	87
14	N M C	100

The numbers of the test is gives 20 questions for 14 students. The posttest was done after treatment process (teaching vocabulary by using random picture), this test is gives to know the final score and to know the students' different competence before and after they get treatment.

### 3. Data Analysis

After knowing the result of the test, the researcher analyzes the percentage and significant different of the students' achievement in vocabulary before and after being taught by using random picture. To know whether the students get good results or not, the researcher gives criteria as follow:

**Table 4.3****Table of the Score's Criteria**

<b>No</b>	<b>Interval Class</b>	<b>Criteria</b>
1.	86 – 100	Very Good
2.	71 – 85	Good
3.	60 – 70	Enough/ Fair
4.	49 – 59	Poor
5.	20 – 48	Bad/ Low

**Table 4.4**

The Frequency Distribution and Percentage of the Students' Achievement in Pre-Test

<b>Grade</b>	<b>Criteria</b>	<b>Frequency</b>	<b>Percentage</b>
A	86 – 100	-	0%
B	71 – 85	3	15%
C	60 – 70	5	25%
D	49 – 59	3	15%
E	20 – 48	3	15%
		<b>N = 14</b>	<b>P =70 %</b>

Based on the data in the table 4.3, the result of pre-test shows percentage and criteria score, there are 15% students get bad/ low, 15% students get less, 25% students get enough/fair, 15% students get good, and 0% students get very good.

**Table 4.5**

The Frequency Distribution & Percentage of the Students' Achievement in Post-Test

<b>Grade</b>	<b>Criteria</b>	<b>Frequency</b>	<b>Percentage</b>
A	86 – 100	12	60%
B	71 – 85	2	10%
C	60 – 70	-	0%
D	49 – 59	-	0%
E	20 – 48	-	0%
		<b>N = 14</b>	<b>P = 70%</b>

The result of pre-test and post-test in the percentage and criteria was different. After using random picture as technique in teaching vocabulary, on the table 4.3 and 4.5 show that A grade has increased (0% to be 60%), B grade has increased (15% to be 10%). C grade, in pre-test was stabiles (25%). D grade, in pretest was stabiles 15% and E grade, in pre-test was stabiles (15%). In conclusion, it shows that after using random picture technique, the students' vocabulary mastery had increased than before using random picture.

The researcher provides the table about the list of pretest and posttest total score to make ease in identifying mean and T- test. The table is as follow:

**Table 4.6**

**The List of Students' Improvement before and after being taught**  
**Random picture technique**

No	Subject	Pretest (X)	Posttest (Y)	D (Y-X)	D (Y-X) <sup>2</sup>
1	A	44	84	40	1600
2	B	54	84	30	900
3	C	60	94	34	1156
4	D	47	90	43	1849
5	E	74	97	23	529
6	F	64	90	26	676
7	G	80	97	17	289
8	H	70	100	30	900
9	I	57	94	37	1369
10	J	67	90	23	529
11	K	77	97	20	400
12	L	47	87	40	1600
13	M	57	87	30	900
14	N	67	100	33	1089
		$\sum X = 865$	$\sum Y = 1.291$	$\sum D = 426$	$\sum D^2 = 13.786$

a). Identify Mean

From the table above, the mean of students' score can be found by applying the following formula:

$$MD = \frac{\sum D}{N} = \frac{426}{14} = 30, 43$$

Mean from X and Y:

$$MD X = \frac{\sum X}{N} = \frac{865}{14} = 61, 79$$

$$MD Y = \frac{\sum Y}{N} = \frac{1291}{14} = 92, 2$$

a) Identifying T- score

Meanwhile, to find the T- score, based on the presented data, the calculation is done by using the following formula:

$$\begin{aligned}
 t &= \frac{MD}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N(N-1)}}} \\
 &= \frac{30\,43}{\sqrt{\frac{13.786 - \frac{(426)^2}{14}}{14(14-1)}}} \\
 &= \frac{30\,43}{\sqrt{\frac{13.786 - \frac{181.476}{14}}{14(13)}}} \\
 &= \frac{30\,43}{\sqrt{\frac{13.786 - 12.962,57}{182}}} \\
 &= \frac{30\,43}{\sqrt{\frac{823,43}{182}}} \\
 &= \frac{30\,43}{\sqrt{4,52}} \\
 &= \frac{30\,43}{2,13} \\
 &= 14,286
 \end{aligned}$$



b) Degree of freedom

To know the significant different between the students' score before and after taught by using random picture, the result of t count must be consulted to t table.

$$\begin{aligned} f &= N - 1 \\ &= 14 - 1 \\ &= 13 \end{aligned}$$

From the T distribution it is found that t- table for  $t_{0,05} = 2,160$

So,  $t_{\text{count}} > t_{\text{table}} = 14,286 > 2,160$

## B. Hypothesis Testing

the hypothesis testing of this study is as follow:

1. If the significant level less than 0.05%, the alternative hypothesis ( $H_a$ ) is accepted and null hypothesis ( $H_o$ ) is rejected. It means that there is different score to the students before and after being taught by using random picture technique. The different is significant.
2. If the significant level more than 0.05%, the null hypothesis ( $H_o$ ) is accepted and alternative hypothesis ( $H_a$ ) is rejected. It means that there is not different score to the students before and after being taught by using random picture technique. The different is not significant.

Whit level significant 0, 05, so  $t_{\text{count}} > t_{\text{table}} = 14, 286 > 2, 160$  it can be concluded that “there is any different score the students in vocabulary before and after being taught be using random picture technique.

### C. Discussion

To decide whether the results of pretest and posttest have significant difference or not, it must be returned to the hypotheses. Two kinds of hypotheses are:

1. Alternative hypothesis ( $H_a$ ) states that teaching vocabulary by using random picture technique as technique of teaching vocabulary is effective.

The use of random picture technique will significant if  $t_{\text{count}} > t_{\text{table}}$ . Data analysis above shows that  $t_{\text{count}} > t_{\text{table}}$  ( $14, 286 > 2, 160$ ), so  $H_a$  is accepted.

2. Null hypothesis ( $H_o$ ) states that teaching vocabulary by using random picture technique as technique of teaching vocabulary is not effective.

The use of random picture technique will significant if  $t_{\text{count}} < t_{\text{table}}$ . Data analysis above shows that  $t_{\text{count}} > t_{\text{table}}$  ( $14, 286 > 2, 160$ ), so  $H_o$  is accepted.

From the computation above, it can be said that  $t_{\text{count}} > t_{\text{table}}$  ( $14, 286 > 2, 160$ ), so the alternative hypothesis ( $H_a$ ) that states that there is significant effect of teaching vocabulary by using random picture technique is accepted and null hypothesis that states there is no significant effect of teaching vocabulary by using random picture technique is rejected.

From the data analysis, the objective of this study is to know if there is an effect applying random picture in teaching vocabulary to the fifth grade students of SDN 1 Gempolan in academic year 2012/ 2013.

In order to gain the objectives of the study, the writer conducts an experiment in a pre-test and post-test design. The research procedures done during teaching and learning process is divided into three steps. First step is preliminary study in which the researcher conducts the preliminary study to know the students' vocabulary mastery by administrating pretest. The second step is giving treatment to the same students. The treatment here is teaching vocabulary by using random picture technique. The last step is giving posttest. In the posttest, the students are given a test to know their vocabulary mastery after they are treated by random picture technique.

Based on the results of the statistical computation using T- test, the results show that there is significant increase between pre-test and post-test scores. The result of T- test is 14,286. If the T- test is compared to T- table with the degree of freedom 13 as stated in hypothesis testing, the T- test 14,286 is higher than the T- table 2, 160. Therefore, based on the hypothesis testing, the  $H_a$  is accepted and the  $H_o$  is rejected, the theory is verified. It means that random picture technique is effective for teaching vocabulary. After getting the treatment, the students are more enthusiastic and motivated to memorize vocabulary they also more enjoy when presenting the material.

The children enjoy vocabulary learning. They pick up new word at a surprised pace in both their first and second of foreign language and they can

understand the concept of words well Pinter (2006: 86). It is a good idea to make deliberate presentation of vocabulary as varied as possible. Harmer (2001:134) states that “Teachers have always used pictures or graphics – whether drawn, taken from books, newspapers and magazines, or photographs – to facilitate learning”. Pictures can also help learners with abstract words, as associating the words with a concrete object makes these words easier to remember. Harmer (2001:135) states that “one of the most appropriate uses for pictures is for the presenting and checking of meaning. An easy way of explaining the meaning of the word aeroplane, for example, is to have a picture of one”. Of course, not all new words can be taught using pictures but most concrete vocabulary can presenting materials for the students need ways or technique, that are various and interesting because if the teacher used interesting technique, it will make the students enjoyable.

The use of method in learning and teaching process is very important, so the teacher should choose one kinds of method in learning and teaching English especially in teaching vocabulary, the method can help the teacher to teach and make the students more enjoyable in learning and teaching vocabulary. Teaching vocabulary is easier and interesting if the teacher uses method that is suitable in teaching vocabulary. One of methods that are easy and interesting to apply in teaching vocabulary is random picture technique.

De Bono (1970: 144) states that “The random picture method is a powerful lateral-thinking technique that is easy to use. It is by far the simplest of all creative techniques and is widely used by people who need to create new ideas “.

In conclusion, it shows that random picture technique is effective in helping students to improve vocabulary mastery and to motivate the fifth grade students of SDN 01 Gempolan to learn English language.