

CHAPTER IV

FINDING AND DISCUSSION OF THE RESEARCH

In this chapter, the writer discusses the finding and discussion of the research which consists of finding of the research, and discussion of the research.

1.1 Finding of the Research

4.1.1 The result of pre test

This research used one class, it consisted of thirteen students, the researcher took all of the students in the eighth grade as the sample of SMPLB Negeri Jepara. The researcher gave them same questions in the tasks. Here the result of pre- test:

Table 4.1.1

The result of pre test

Subject	Pre-test
S-1	50
S-2	66
S-3	69
S-4	69
S-5	45
S-6	0
S-7	68
S-8	65

S-9	67
S-10	50
S-11	77
S-12	79
S-13	82
N=13	787
	$\Sigma=1574$
	$X_1 = 60.53846$

4.1.2 The result of post test

After the researcher gave the students pre-test and some treatments, the researcher gave the students post-test to know the result of the research. It was the score of post-test.

Table 4.1.2

The result of post test

Subject	Post test
S-1	65
S-2	66
S-3	80
S-4	65
S-5	50
S-6	50

S-7	55
S-8	69
S-9	80
S-10	50
S-11	95
S-12	95
S-13	100
N=13	920
	$\Sigma=1840$
	$X_2 = 70.76923$

Based on the pre-test result above, the total score was 1574 and they got mean 60.5. Furthermore, the total of post-test result score was 1840. The students got mean score 70.76 or 71. The result showed that there was an improvement in post-test result than pre-test.

4.1.3 The gained score

The gained scores was used to know the differences about the improvement score result between pre-test and post-test in the classroom. Actually, in one group pre-test post-test research did not use gained scores, because it was used to know the differences between control and experiment group. But, in this study, the

researcher used gained score to know the differences between pre-test and post-test scores. Table 4.1.3. below described the gained scores of pre-test and post-test of all the members of the class were 13 students.

Table 4.1.3
The gained score

Subject	Pre-test	Post test	Gain (d)
S-1	50	65	15
S-2	66	66	0
S-3	69	80	11
S-4	69	65	-4
S-5	45	50	5
S-6	0	50	50
S-7	68	55	-13
S-8	65	69	4
S-9	67	80	13
S-10	50	50	0
S-11	77	95	18
S-12	79	95	16
S-13	82	100	18

N=13	787	920	$\Sigma d = 133$
	$X_1 =$ 60.53846	$X_2 =$ 70.76923	

The tabel data above described that the gained score after the researcher giving pre-test and post –test . The lowest gained score of the class was 0, whereas the highest score of the class was 50. Meanwhile, the mean of pre-test was 60.5, the mean of post-test was 70.76 or 71.

4.1.4 Table of determine

After taken pre test and post test, data is process and produce of determine.

Step of determine x_d and x_d^2 as below the table :

Table 4.1.4

Determine

Subject	D	D ²	X_d (x-Md)	X_d^2
1	15	225	4.769231	22.74556
2	0	0	-10.2308	104.6686
3	11	121	0.769231	0.591716
4	-4	16	-14.2308	202.5148
5	5	25	-5.23077	27.36095
6	50	2500	39.76923	1581.592

7	-13	169	-23.2308	539.6686
8	4	16	-6.23077	38.82249
9	13	169	2.769231	7.668639
10	0	0	-10.2308	104.6686
11	18	324	7.769231	60.36095
12	16	256	5.769231	33.28402
13	18	324	7.769231	60.36095
	$\Sigma D =$ 133	$\Sigma D^2 =$ 4145	$\Sigma X_d =$ -0.000124	$\Sigma X_d^2 =$ 2784,308

Meanwhile, the researcher also calculated the result of pre-test and post-test by using manual statistic that explained below:

$$t_0 = \frac{MD}{SE_{MD}}$$

To find out the mean of differences (MD) between variable X_1 and X_2 , the researcher used this formula:

$$MD = \frac{\sum D}{N}$$

$$MD = \frac{133}{13}$$

$$MD = 10.230769$$

Then, the researcher find out SE_{MD} , the researcher calculated the standard error from mean of differences (SE_{MD}) between variable X_1 and X_2 :

$$SDD = \frac{\sqrt{\sum D^2}}{N} - \left[\frac{\sum D}{N} \right]^2$$

$$SDD = \frac{\sqrt{4145}}{13} - \left[\frac{133}{13} \right]^2$$

$$SDD = \sqrt{318.846} - [10.231^2]$$

$$SDD = \sqrt{318.846} - 104.673$$

$$SDD = \sqrt{214.173}$$

$$SDD = 14.64$$

$$SDD = 15.00$$

After that the researcher find out the Standard error of mean differences:

$$SE_{MD} = \frac{SDD}{\sqrt{N-1}}$$

$$SE_{MD} = \frac{14.64}{\sqrt{13-1}}$$

$$SE_{MD} = \frac{14.64}{\sqrt{12}}$$

$$SE_{MD} = \frac{14.64}{3.46}$$

$$SE_{MD} = 4.231$$

The last calculation is determining the result of t observation (t_0) of the test with formula:

$$t_0 = \frac{MD}{SE_{MD}}$$

$$t_0 = \frac{10.231}{4,231}$$

$$t_0 = 2.4181 \text{ or } 2.42$$

The result was 2.42 indicated that there was a difference of degree as much as 2.42. Then, to complete the result of the research, the researcher finds out the degree of freedom (*df*) with the formula:

$$df = N-1$$

$$df = 13-1$$

$$df = 12$$

$df = 12$ (see table of "t" value at the degree of significance of 5% and 1%) at degree of significance 5% = 2,16, at the degree of 1 % = 3,01. The result of analyzing the data by using the above formula shows that coefficient is 2,42. It means that there is a significance increase after vocabulary mastery is used to teach English songs.

4.2 Discussion

This research uses quantitative data. The data proceeded for this research are taken from the vocabulary mastery pre test before being taught by using English songs and post test result after being taught by using English songs of the eighth graders of SMPLB Negeri Jepara. The calculation result of pre test and post test are compared to know the difference between them.

4.2.1 The vocabulary mastery of the eight graders students of SMPLB Negeri Jepara before being taught by using English songs

Before the researcher gave pre test to the students, the writers observe to find some problem in teaching vocabulary of SMPLB Negeri Jepara. In teaching vocabulary the teacher seldom used teaching technique or media. The teacher just explained the materials, after that the teacher gave examples of the write in blackboard and asked the students to finished the materials. It made the students find some difficulties and needed much time to finished the materials.

After the writer had found the some problems of the process of teaching learning vocabulary mastery of the eight graders students of SMPLB Negeri Jepara, the writer gave the pre test to the eight graders of SMPLB Negeri Jepara to know vocabulary of the students before being taught by using English songs.

Every students was given the same ask to do the pre test indiviully in vocabulary. Then, the writer got the result of pre test and calculated the data scores. After giving the pre test and calculating the score data, the result shows that the minimum score is 0, the maximum score is 82 and the mean is 60,53. Meanwhile the calculation of the standart deviation is 21,39. It is categoriezed that

the improving *Tuna Grahita* students' vocabulary mastery by using English songs is sufficient.

4.2.2 The vocabulary mastery of the eight graders students of SMPLB Negeri Jepara after being taught by using English songs

After the students did the pre test, the writer gave treatments to the eighth graders students of SMPLB Negeri Jepara in teaching vocabulary of mastery. The researcher gave some questions to the students before they read and listen, look at the picture and colouring, the question has purpose to simulate students about content of the materials. When the writer conducted treatment using English songs , the students participate to answer the questions enthusiastically.

English songs implicitly as some questions which are provide before the students use English songs, in order to build the students interest and motivation, also their cognitive factors and English songs is very useful to activate, thus the students can predict what will be faced by them in English songs.

After being taught by using English songs, the vocabulary mastery of eighth graders of SMPLB Negeri Jepara is categorized as good. The progress of the students' vocabulary mastery can be seen from the post test score data, the minimum score is 50, the maximum score is 100 and the mean is 70,7 or 71. Meanwhile the calculation

of the standart deviation 17,87

4.2.3 The vocabulary mastery of the eight graders students of SMPLB Negeri Jepara before and after being taught by using English songs

To know whether there is a significant difference or not significant difference, the researcher uses hypothesis testing. If there is not significant difference, the null hypothesis is accepted and the alternative hypothesis is rejected. In contrast, the null hypothesis is rejected and the alternative hypothesis is accepted if there is a significant difference between two variables. In finding a significant difference between two variables, the writer conducted t-test for dependent variable.

After processing the data, the writer finds that the comparison of the mean of the post test is better than the pre test result ($60,5 > 70,8$). Meanwhile the hypothesis testing shows the result that t observation (t_o) obtained (2,42) is greater that the t-table ($df=12$) and the critical value used the significant 5% is 2,16, and the t_o is 2,42. So, the hypothesis null is rejected while the alternative hypothesis is accepted. It means that there is a significant difference of the vocabulary mastery of eighth graders of SMPLB Negeri Jepara before and after being by using English songs.

Thus, the confirmation of the research hypothesis shows that English songs could be use as the effective technique to teach vocabulary mastery of the eighth graders students of SMPLB Negeri Jepara.

