

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter present the findings as the result of analyzing the data. Therefore, this chapter discusses data presentation, data analysis, and discussion.

A. Research Finding

1. Data Presentation

In this chapter, the purpose of the researcher is to know The Effectiveness of Teaching Vocabulary by Using Audio-Visual as Media Toward Vocabulary Mastery of Seventh Grade Students of SMPN 3 Kedungwaru Tulungagung in Academic Year 2014/2015. The researcher involves a VII^C class that consist of 26 students. So, the researcher uses a population sampling which connects each other (T-Test for one sample that are value between pre test and post test).

To describe the data, the researcher showed the criteria of score of the students test result, mean of the test result, to know the students' score whether it was good or not, the researcher gave the criteria as follows:

Table 4.1 Criteria of the Score

No.	Interval Class	Criteria
1.	80-100	Very Good
2.	70-79	Good
3.	60-69	Enough/ Fair
4.	50-59	Poor
5.	0-49	Bad/ Low

As stated earlier, there were 26 students given pre test and post test through the same test format in vocabulary test, the students' scores in both pre test and post test were presented in the following tables:

- a. The result of student's achievement before using Audio-Visual as Media.

Table 4.2

The Result of the Pre test Before Using Audio-Visual as Media of One Group Experimental

Subject	Score of Pre Test (x)
1	70
2	73
3	71
4	58
5	76
6	73
7	73
8	76
9	73
10	65
11	68
12	74
13	78
14	67
15	76
16	61
17	77
18	83
19	72
20	74
21	70
22	79
23	78
24	72
25	70
26	58
N = 26	X= 1865

The pretest has been done before treatment process teaching vocabulary by using Audio-Visual Media. The number of test given were 30 questions in the form gap filling and matching. This test is given to know the basic competence for all the students of VII^C Class and to know their earlier knowledge before they get the treatment. The table shows the means of pretest by dividing all of score in pretest with number of the class. The result of the mean of pretest score is

$$\bar{x} = \frac{\sum x}{N} = \frac{1865}{26} = 71.73$$

b. The result of student's achievement after using Audio-Visual Media.

Table 4.3
The Result of the Post Test After Using Audio-Visual as Media of
One Group Experimental

Subject	Score of Post Test (y)
1	88
2	86
3	88
4	82
5	82
6	78
7	78
8	80
9	88
10	70
11	78
12	80
13	88
14	82
15	80
16	78
17	90
18	92

19	84
20	90
21	86
22	90
23	84
24	94
25	82
26	72
N = 26	X= 2170

The number of the post test given were 30 questions in the form gap filling and matching for 26 students of VII^C Class. The post test has been done after treatment by using Audio Visual Media in teaching vocabulary. It has been done to know the final score and to know the student's difference competence before and after they get treatment. The table shows the mean of post test by dividing all score in post test with number of class. So, mean of the post test score is

$$\bar{x} = \frac{\sum x}{N} = \frac{2170}{26} = 83.46$$

In this study, the result of pre test and post test is different. The mean is different between pre test and post test (83.46 and 90.15), the overage of post test is higher than pre test (83.46>71.73).

2. Data Analysis

Data analysis is done to know the different score before treatment and after treatment by searched the gain "d" (post test – pre test) and the total gain score (Σ^d). Here also was sought the number of subject (N), the total of pre test

and post test score and its mean (X). The result of pre test and post test to significance test the design as follow:

Table 4.4

The Result of the Pre test and Post Test of One Group

Experimental

Subject	Score of Pre Test (x)	Score of Post Test (y)	Gain (d); (y-x)	d²
1	70	88	18	324
2	73	98	13	169
3	71	98	17	289
4	58	82	24	576
5	76	92	6	36
6	73	96	5	25
7	73	90	5	25
8	76	90	4	16
9	73	98	15	225
10	65	76	5	25
11	68	78	10	100
12	74	96	6	36
13	78	98	10	100
14	67	82	15	225
15	76	92	4	16
16	61	82	17	289
17	77	90	13	169
18	83	92	9	81
19	72	96	12	144
20	74	90	16	256
21	70	86	16	256
22	79	94	11	121
23	78	92	6	36
24	72	94	22	484
25	70	92	12	144
26	58	82	14	196
N = 26	X= 1865	X= 2344	Σd= 305	Σd²= 4107

The total of before treatment score is 1865 with $X_1 = 71.73$. And then the total of the score after given the treatment by the reseacher is 2344 with $X_2 = 90.15$. Moroever the total of gain is $d = 479$

1. Finding X_d and X^2_d

After the researcher knew the score before treatment and after treatment, the researcher searched the “ X_d ” the deviation of every subject ($d - M_d$). In this part M_d is mean from the difference between before treatment and after treatment. Here also searching the X_d (square of deviation).

Table 4.5 Find the X_d and X^2_d

Subject	D	$X_d (d - M_d)$	X^2_d
1	18	6	36
2	13	1	1
3	17	5	25
4	24	12	144
5	6	-6	36
6	5	-7	49
7	5	-7	49
8	4	-8	64
9	15	3	9
10	5	-7	49
11	10	-2	4
12	6	-6	36
13	10	-2	4
14	15	3	9
15	4	-8	64
16	17	5	25
17	13	1	1
18	9	-3	9
19	12	0	30
20	16	4	16
21	16	4	16
22	11	-1	1

23	6	-6	36
24	22	10	100
25	12	0	0
26	14	2	4
N = 26	Σd= 305		ΣX²d = 787

$$Md = \frac{\Sigma d}{N} = \frac{305}{26} = 12$$

2. Finding the significance

The significance test for this design is

$$t = \frac{Md}{\sqrt{\frac{\Sigma X^2 d}{N(N-1)}}}$$

$$t = \frac{12}{\sqrt{\frac{787}{26(26-1)}}}$$

$$t = \frac{12}{\sqrt{\frac{787}{26(25)}}}$$

$$t = \frac{12}{\sqrt{\frac{787}{650}}}$$

$$t = \frac{12}{\sqrt{1.21}}$$

$$t = \frac{12}{1.1}$$

$$= 11$$

To know the degree of freedom, the researcher find the result by using the formula below

$$d.b = N-1 = 26 - 1 = 25$$

The results above were the same when the researchers used SPSS 16.0 as shown below:

Table 4.6 Finding the T- Table By Using SPSS

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 sebelum	71.7308	26	6.13552	1.20327
setelah	83.4615	26	5.94798	1.16649

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 sebelum & setelah	26	.570	.002

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 sebelum - setelah	- 1.17308 E1	5.60398	1.09903	-13.99427	-9.46727	-10.674	25	.000

3. Hypothesis Testing

As mentioned previously in chapter I, the research hypothesis were as follows:

- The students have good achievement after being taught by using audio-visual as media.
- There was any significant effect of using audio-visual as media for teaching vocabulary.

$$T_{\text{count}} = 11.00$$

$$T_{\text{table}} = 2.060 \text{ (Distribution of } t \text{)}$$

- The null hypothesis (H_0) in this study is “There are not significant different score of the students who are taught and without using Audio-Visual as media”. The alternative Hypotysis (H_a) in this sudy is “There are significant different score of the students who are taught with and without using Audio-Visual as media”.
- By known level significant 5% or 00,5, so $T_{\text{count}} = 11.00 > T_{\text{table}} = 2.060$. It means “There is any significant effect of using Audio-Visual as media in teaching vocabulary to increase student’s vocabulary mastery in VII ^C grades of SMPN 3 Kedungwaru in academic year 2014/2015.

B. Discussion

From the data analysis, the objective of this study was to know if there was an effect of using Audio-Visual as media in teaching vocabulary to increase

student's vocabulary mastery in VII^C grades of SMPN 3 Kedungwaru in academic year 2014/2015.

Based on research design in chapter III in this research, according to Cresswell (2013:242) teaching and learning process was divided into three steps. First step was the researcher held the pre test by giving vocabulary test without given Audio-Visual as media previously. It is used to know the students' earlier vocabulary before they get the treatment.

The second were given treatment to the students. This section the researcher held twice treatment. The treatment here was teaching vocabulary by using Audio-Visual as media. The material taken from syllabus talking about describing people, animal, and things. After the students got the treatment, they felt happy, and very active to learn English vocabulary. Then the last step, the researcher held the post test to the students.

After all the activities above, the researcher gave interpretation tcount. The researcher considered the d.b ($d.b = N - 1$) with the d.b is (25). The researcher consulted to the score table "t", at the significance level of 0.05. In real, with the d.b (25), the researcher can get the table at 0.05 significance ttable is (2.060).

By comparing the "t" that the researcher have got in calculation tcount = (11.00) and the value of "t" on the t score table $t_{0.05} = (2.060)$. It is known that tcount is more higher than ttable = $11.00 > ttable = 2.060$.

Because of the t-count is higher than t-table the alternative hypothesis (H_a) is accepted. It means that there was different score to the VII^C grades of SMPN 3 Kedungwaru between before using Audio-Visual as media and after using Audio-

Visual as media. The different was significant. It can be inferred too that Audio-Visual is very successful in acting as a bridge for the students in learning vocabulary. In this way there were several factors that might explain its success in increasing student's vocabulary mastery.

The first factors was the researcher using Media Based Approach in teaching learning process when he taught the material in the class. Thus, the Audio-Visual as media encouraged the students to see and hear the video and then the students had to understand what vocabulary in the context of the video. Therefore, the students listened seriously and they would be motivated to increase their vocabulary knowledge.

The second factors dealt with concentration of the students. In Audio Visual media, the students must pay attention in every slide in video, and they must understand what vocab in every slide, the students must find the noun, adjective, verb, adverb. And then after the students understand, they must write all the vocabulary in their own book and some students wrote the vocabulary in white board in front of the class.

The third factor dealt with student's involvement. In English learning by using Audio-Visual as media, the teacher was only facilitator in the class, and teachers required that students to be active when the teacher gave the material by using the Audio-Visual. It strengthened by Arsyad's statement (2009:26) video can replace the role of teacher in the process of teaching learning in a long distance. In this situation video as the source when the students were not active, they did not get the understanding of material as the students who paid attention to

the material Audio-Visual carefully. Based on the research finding. Audio-Visual as media to teach vocabulary surely shows the real effectiveness, because this method is gives more spirit and enthusiastic to learn English of students VII C grades at SMPN 3 Kedungwaru. It mean in teaching and learning activities in their schools, not all teachers explained the material by using the LCD projector. And when the researcher provide a method that rarely used by teachers in the form of a video as the media. The students felt to have a more enthusiastic when the researchers applied the method will be applied. As already described in the previous chapter like based on Heinich (2005) in the advantages using video as media, video can inspires the emotions of viewers of video media, therefore, it can play a role in shaping the attitudes of individual, social attitudesto. So, teaching vocabulary by using Audio-Visual as media is effective to improve student's vocabulary mastery.