

CHAPTER IV

RESULT OF THE STUDY AND DISCUSSION

A. Description of the Data

This section consists of the measurement of central tendency (Mean, median and mode of each group score), the measurement of variability (standard deviation and standard error of the mean), some figures and tables of each group score and the discussion of the study.

1. The Result of Pre Test Score of Class Experiment and Class Control

The writer gave pre test to the experiment class and control class. The first, pre test was conducted to the experiment class. It was conducted on Saturday, August 15th, 2015, at 07.50-09.10 am: in the class VIII.B with the number of student were 25 students. Than for pre test was conducted to control class. It was conducted on Tuesday, August 18th, 2015, at 10.10-11.50 am; in the class VIII.C with the number of student were 26 students.

**Table 4.1 the Description of Pre Test Score of
Experimental Class and Control Class**

No	Experiment Class		Control Class	
	Students' Code	Score	Students' Code	Score
1	E01	55	C01	42.5
2	E02	55	C02	27.5
3	E03	35	C03	47.5
4	E04	60	C04	45
5	E05	37.5	C05	47.5
6	E06	45	C06	47.5

7	E07	50	C07	30
8	E08	55	C08	32.5
9	E09	42.5	C09	51.5
10	E10	57.5	C10	42.5
11	E11	65	C11	42.5
12	E12	52.5	C12	30
13	E13	68.5	C13	35
14	E14	45	C14	37.5
15	E15	20	C15	50
16	E16	62.5	C16	27.5
17	E17	25	C17	40
18	E18	52.5	C18	50
19	E19	45	C19	47.5
20	E20	52.5	C20	37.5
21	E21	32.5	C21	30
22	E22	40	C22	-
23	E23	67.5	C23	-
24	E24	35	C24	-
25	E25	47.5	C25	-
26	-	-	C26	-
Highest Score		68.5		51.5
Lowest Score		20		27.5
Mean		48.24		39.28
Standard Deviation		22.695		7.886
Standard Error of Mean		4.633		1.762

Based on the result of research in class VIIIB as experiment class before was taught by Authentic materials as media, the highest pre test score was 68.5 and the lowest pre test score was 20, the mean of experiment class was 48.24 and the standard deviation of experiment class was 22.695.

In addition, the result of research in class VIIIC as control class before was taught by textbook, the highest pre test score was 51 and the lowest pre test score was 27, the mean

of control class was 39.28 and the standard deviation of control class was 7.886. (See detail in appendix 2.1).

2. The Result of Post-Test Score of Experiment Class and Control Class

The writer gave post-test to the experiment class and control class. The first, post-test was conducted to the experiment class. It was conducted on Saturday, August, 29st, 2015, at 07.50-09.10 am: in the class VIII.B with the number of student were 25 students. Than for post-test was conducted to control class. It was conducted on Tuesday, September 3th, 2015, at 10.10-11.50 am; in the class VIIC with the number of student were 26 students.

**Table 4.2 The Description of Post Test Score of
Experimental Class and Control Class**

No	Experiment Class		Control Class	
	Students' Code	Score	Students' Code	Score
1	E01	55	C01	55
2	E02	47.5	C02	57.5
3	E03	80	C03	74.5
4	E04	70	C04	52.5
5	E05	70	C05	62.5
6	E06	80	C06	70
7	E07	70	C07	57.5
8	E08	72.5	C08	65
9	E09	87.5	C09	65
10	E10	72.5	C10	65
11	E11	60	C11	70
12	E12	77.5	C12	62.5
13	E13	60	C13	57.5
14	E14	75	C14	60

15	E15	62.5	C15	65
16	E16	62.5	C16	55
17	E17	87,5	C17	67.5
18	E18	72.5	C18	57.5
19	E19	62.5	C19	67.5
20	E20	65	C20	62.5
21	E21	72.5	C21	62.5
22	E22	77.5	C22	50
23	E23	70	C23	67.5
24	E24	65	C24	45
25	E25	57.5	C25	52.5
26	-	-	C26	70
Highest Score		87,5		74.5
Lowest Score		47.5		45
Mean		68.8		60.69
Standard Deviation		9.251		6.965
Standard Error of Mean		1.888		1.393

Based on the result of research in class VIII.B as experiment class after was taught by using Authentic materials as media, the highest post- test score was 87.5 and the lowest post- test score was 47.5, the mean of experiment class was 68.8, the standard deviation of experiment class was 9.251 and the standard error of post-test experiment class was 1.888.

In addition, the result of research in class VIII.C as control class after was taught by using textbook, the highest post test score was 74.5 and the lowest post test score was 45, the mean of control class was 60.69, the standard deviation of class control was 6.965, the standard error of class control was 1.393. (See detail in appendix 2.1).

3. The comparison of post-test score of experiment and control class

The writer concluded the comparison of post-test score of experiment and control class. Here, the calculation of the result in table 4.3:

No	The Post-Test Score		
	Experiment	Control	Increased
1	55	55	0
2	47.5	57.5	-10
3	80	74.5	4.5
4	70	52.5	17.5
5	70	62.5	7.5
6	80	70	10
7	70	57.5	12.5
8	72.5	65	7.5
9	82	65	17
10	72.5	65	7.5
11	60	70	-10
12	77.5	62.5	15
13	60	57.5	2.5
14	75	60	5
15	62.5	65	-2.5
16	62.5	55	7.5
17	87.5	67.5	19.5
18	72.5	57.5	15

19	62.5	67.5	-5
20	65	62.5	2.5
21	72.5	62.5	10
22	77.5	50	27.5
23	70	67.5	2.5
24	65	45	20
25	57.5	52.5	5
26	-	70	70
Total score	1722	1597	

B. Result of Data Analysis

1. Testing Hypothesis Using Manual Calculation

To test the hypothesis of the study, the writer used t-test statistical calculation. The first, the writer calculated the standard deviation and the standard error of X_1 and X_2 . It was found the standard deviation and the standard error of post-test of X_1 and X_2 at the previous data presentation. It could be seen on this following table 3.7:

Table 4.4 the standard deviation and standard error of X_1 and X_2

Variable	The Standard Deviation	The Standard Error
X_1	9.2519	1.888
X_2	6.965	1.393

Where:

X_1 = Experiment Class

X_2 = Control Class

The table showed the result of the standard deviation calculation of X_1 was 9.2519 and the result of the standard error mean calculation was 1.888. The result of the standard deviation calculation of X_2 was 6.965 and the result of the standard error mean calculation was 1.393.

The next step, the writer calculated the standard error of the differences mean between X_1 and X_2 as follows:

Standard Error of mean of score difference between variable 1 and variable II:

$$\begin{aligned}SEm1 - SEm2 &= \sqrt{SEm1^2 + SEm2^2} \\&= \sqrt{1.888^2 + 1.393^2} \\&= \sqrt{3.564544 + 1.940449} \\&= \sqrt{5.504993} \\&= 3.423\end{aligned}$$

Then, to examine the hypothesis, the writer used the formula as follow:

$$to = \frac{M1 - M2}{SEm1 - SEm2}$$

$$= \frac{68.8 - 60.29}{2.346}$$

$$= 3.495$$

Next, the writer accounted degree of freedom (df) with the formula as follow:

$$df = (N1 + N2 - 2)$$

$$= (25 + 26 - 2)$$

$$= 49$$

t_{table} at df 49 at 5% significant level = 3.495

The writer chose the significant level on 5%, it means the significant level of refusal of null hypothesis typed stated on non-directional (two- tailed test). It meant that the hypothesis can't direct the prediction of alternative hypothesis.

The calculation above showed the result of t- test calculation as in the table follows:

Table 4.5 the result of T-test

Variable	T Observed	T table		Df
		5%	1%	
$X_1 - X_2$	3.495	2.01	2.68	49

Where:

X_1 : Experiment class

X_2 : Control class

T_{observe} : The Calculated Value

T_{table} : The Distribution of t value

Df : Degree of Freedom

Based on the result of hypothesis test calculation, it was found that the value of t_{observed} at significance level or $2.01 < 3.495 > 2.68$. It meant H_a was accepted and H_o was rejected.

It could be interpreted based on the result of calculation that H_a stating the students taught by used authentic materials as media have better vocabulary mastery that taught using handout was accepted and H_o stating that the students taught by used authentic materials as media not have better vocabulary mastery than those taught used textbook was rejected. Therefore teaching using authentic material as media gave significant effect on English vocabulary mastery of the eighth grade students MTs Darul Amin palangka raya.

2. Testing Hypothesis Using SPSS Program

The writer also applied SPSS16 program to calculate t-test in testing hypothesis of the study. The result of t-test using SPSS16 was used to support the manual calculation of the t-test. The result of the t-test using SPSS16 program could be seen as follows:

Table 4.6 the Standard Deviation and the Standard Error of X_1 and X_2

Group Statistics					
	Class	N	Mean	Std. Deviation	Std. Error Mean
SCORE	1.00	25	69.060	9.308	1.86
	2.00	26	61.423	7.110	1.39

The table showed the result of the standard deviation calculation of X_1 was 9.308 and the result of the standard error mean calculation was 1.86. The result of the standard deviation calculation of X_2 was 61.423 and the standard error mean calculation was 1.39.

Table 4.7 the Calculation T-test Using SPSS 16 Program Independent Sample Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SCORE	Equal variances assumed	1.539	.221	3.301	49	.002	7.63692	2.31383	2.98711	12.28674
	Equal variances not assumed			3.283	4.491	.002	7.63692	2.32604	2.95178	12.32207

Based on the result of t-value using SPSS 16 program, since the result of the post-test between experimental and control group had difference score of variance, it found that result of t_{observed} was 3.301, the result of mean differences between experiment and control group was 7.63692.

To examine the truth or the H_0 stating that there is no significant difference between English vocabulary mastery using authentic material as media and without authentic material as media on English vocabulary mastery at the eighth grade student MTs Darul Amin Palangka Raya was rejected, the result of post-test was interpreted on the result of degree freedom to get t-table. the result degree freedom (df) was 49. The following table was the result of t_{observed} and t_{table} from 49 df at 5% and 1% significance level.

Table 4.8 the Result of T-Test

Variable	T Observed	T table		df
		5%	1%	
$X_1 - X_2$	3.301	2.01	2.68	49

Where:

X_1 : Experiment class

X_2 : Control class

T_{observe} : The Calculated Value

T_{table} : The Distribution of t value

Df : Degree of Freedom

3. Interpretation

The interpretation of using SPSS16 program also supported the result of manual calculation. From the result of t-value using SPSS16 above was found that H_o was rejected. It was found $t_{observed}$ 3.301 was higher than t_{table} 2.01 in the significance level of 5% and higher in the significance level of 1% 2.68. It could be interpreted that alternative hypothesis H_a was accepted. Therefore teaching using authentic material as media gave significant effect on English vocabulary mastery of the eighth grade students MTs Darul Amin palangka raya.

C. Discussion

The result of the analysis showed that authentic materials as media gave significance effect to the English vocabulary mastery. It could be proved from the students' score the student taught used authentic materials as media reached higher score than those used textbook. It was found the mean of experiment class the score (X_1) was 68.8 and the mean of control class (X_2) was 60.69. Then, those results were compared using T-test and it was found $t_{observed}$ computation used manual was 3.495 and t_{table} was 2.01. It meant, from the computation was found $t_{observed} > t_{table}$.

There were some reasons why using Authentic Materials as media gives effect on vocabulary mastery at the eighth grade students at MTs Darul Amin Palangka Raya. First, Authentic materials as media are positive and they can enjoy to study English vocabulary. It could was saw from score of mean between pre test and post test of experiment class. The score of mean in post test was higher than the score of mean in pre test (Post test = 88.5 > pre test = 77.5). It indicated that the students' score

increased after was conducted treatment. It supported the previous study by Zoghi stated in chapter II page 13 for this result, the results show that most of the student' attitude towards the use authentic English of authentic English language material are positive and they enjoy learning.¹

Second, teaching vocabulary by using authentic material can effect on students' motivation and increases student' vocabulary at the students of eighth grade students of MTs darul amin Palangka Raya. This supported by Chavez stated in chapter II page 25, the main advantages of using authentic materials are as follows:² It has a positive effect on students' motivation, it gives authentic cultural information, it exposes students to the real language, it relates more closely to students need, it supports a more creative approach to teach, and it increases students' vocabularies.

The tried, the students were preferred study English vocabulary through authentic materials so that they could really used such materials in the real situations. Although learning vocabulary through authentic materials were very active and had more comfort as well as self confidence when they attended and participated in the class. Nonetheless, they seemed not to have difficulty in understanding the lesson using authentic materials since most of them had certain background knowledge about the class materials.

¹ Masoud Zoghi, Ftemeh moradiyan zardak, seyyed ali kazemi, The Effects of Authentic Materials On Vocabulary Development, *Journal International: IJLLALW*, 2014. P.157. URL : <http://www.ijllalw.org/finalversion5413.pdf> (acsessed on April 22, 2015 at 10:23 am)

²Chavez, *Learner's Perspectives on Authenticity*, New York: Addison-Wesley Longman,1998, P. 104.

The fourth, using authentic material, the students were enjoyed to learned English vocabulary. Students get greatly motivated again for reading by using authentic material in the foreign language classroom, deference between non authentic materials, the students were boring to learn English vocabulary because they were used text book there is no other media.

Besides, the students in control class were bored to learn English. It is caused they were taught using non-authentic materials. Non-authentic material does not have varied vocabulary and it does not give students authentic information about the culture. It can be said that this is the factor why the students' scores of experimental class are higher than the students' scores of control class.

In order to know there is significant difference or no between students' scores who taught using authentic materials and those who taught using non-authentic materials in students of eighth grade students of MTs Darul Amin Palanga Raya, the writer had conducted pre-test and post-test to both classes (experimental and control class). From the result, the writer known that teaching students by using authentic materials can improve students' skill in learning English especially in English vocabulary mastery. It is known from data that collected from students' scores in pre-test and post-test of both classes that had been calculated by the writer.

The data showed that students' scores in post-test of experimental class were higher than the students' scores in post-test of control class. So, it proves that Ha that stating there is significant difference between students' scores who taught using authentic materials and those who taught using non-authentic materials is accepted,

and H_0 that stating there is no significant difference between students' scores who taught using authentic materials and those who taught using non-authentic materials is rejected.

So, using authentic material gave effect for English vocabulary mastery, for student's score of eighth grade student of MTs Darul Amin palangka raya.