

CHAPTER IV

FINDINGS AND DISUSSION

A. Findings

1. Description of Data

In this chapter, the researcher presents the data description of the seven grade students of MTs Ahasnul Huda Bahalayung about the process of teaching- learning process by using word wall media. To find out more the influence students toward vocabulary who use and do not use word wall media, the researcher tested the students using test, the researcher gave the best to students and they answered the test. In this chapter the researcher describe about the result of the research on the field that collected by technique of data collection. English learning process at MTs Ahsanul Huda

The researcher did the research on 27th July 2017 until 7th September 2017. Before do researcher do research, researcher analyze the instrument whether the instrument is valid and reliable or not by using SPSS 16 program.

Table 4.1 Analysis of Validity

No. Item		r_{table}	Status
1	0.681	0.312	Valid
2	0.562	0.312	Valid

3	0.399	0.312	Valid
4	0.549	0.312	Valid
5	0.464	0.312	Valid
6	0.39	0.312	Valid
7	0.433	0.312	Valid
8	0.477	0.312	Valid
9	0.465	0.312	Valid
10	0.443	0.312	Valid
11	0.35	0.312	Valid
12	0.476	0.312	Valid
13	0.512	0.312	Valid
14	0.36	0.312	Valid
15	0.458	0.312	Valid
16	0.509	0.312	Valid
17	0.447	0.312	Valid
18	0.407	0.312	Valid
19	0.457	0.312	Valid
20	0.476	0.312	Valid
21	0.458	0.312	Valid
22	0.509	0.312	Valid
23	0.447	0.312	Valid
24	0.407	0.312	Valid
25	0.457	0.312	Valid
26	0.476	0.312	Valid
27	0.433	0.312	Valid
28	0.477	0.312	Valid
29	0.465	0.312	Valid
30	0.443	0.312	Valid
31	0.681	0.312	Valid
32	0.562	0.312	Valid
33	0.399	0.312	Valid
34	0.549	0.312	Valid
35	0.464	0.312	Valid

36	0.457	0.312	Valid
37	0.476	0.312	Valid
38	0.458	0.312	Valid
39	0.509	0.312	Valid
40	0.447	0.312	Valid

Based on validity test by using SPSS 16 program showed that the test is valid in this experiment test include one until forty questions. In the table show r_{count} is higher than r_{table} . So that, the test can used to measure the students ability in the research filed.

Reliability Statistics

Cronbach's Alpha	N of Items
.740	41

Table 4.2 Analysis of reliability

Item Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
item_1	62.16	228.640	.667	.730
item_2	62.08	231.410	.547	.734
item_3	62.08	233.077	.381	.736
item_4	62.16	230.307	.530	.732
item_5	62.08	232.410	.447	.735
item_6	62.32	231.393	.363	.734
item_7	62.12	232.193	.413	.735
item_8	62.24	230.523	.453	.733
item_9	62.24	230.690	.441	.733
item_10	62.16	231.640	.421	.734
item_11	62.16	232.807	.326	.736

item_12	62.12	231.693	.457	.734
item_13	62.24	230.023	.490	.732
item_14	62.12	233.027	.339	.736
item_15	62.20	231.083	.435	.733
item_16	62.16	230.807	.489	.733
item_17	62.12	232.027	.428	.734
item_18	62.28	231.293	.381	.734
item_19	62.32	230.393	.431	.733
item_20	62.12	231.693	.457	.734
item_21	62.20	231.083	.435	.733
item_22	62.16	230.807	.489	.733
item_23	62.12	232.027	.428	.734
item_24	62.28	231.293	.381	.734
item_25	62.32	230.393	.431	.733
item_26	62.12	231.693	.457	.734
item_27	62.12	232.193	.413	.735
item_28	62.24	230.523	.453	.733
item_29	62.24	230.690	.441	.733
item_30	62.16	231.640	.421	.734
item_31	62.16	228.640	.667	.730
item_32	62.08	231.410	.547	.734
item_33	62.08	233.077	.381	.736
item_34	62.16	230.307	.530	.732
item_35	62.08	232.410	.447	.735
item_36	62.32	230.393	.431	.733
item_37	62.12	231.693	.457	.734
item_38	62.20	231.083	.435	.733
item_39	62.16	230.807	.489	.733
item_40	62.12	232.027	.428	.734
total	31.48	59.260	1.000	.909

T test is reliable with value of Cronbach's Alfa than 70. The table above shows the value is 736 with high category.

Inferential analysis is aimed at testing the research questions and hypotheses. The test normality and homogeneity test. Those use to analyze whether the hypotheses using parametric research. These are tables of analysis result by using SPSS 16 Program.

Table 4.3 Analysis of Normality

One-Sample Kolmogorov-Smirnov Test			
		Experiment	Control
N		19	17
Normal Parameters ^{a,b}	Mean	88.42	64.82
	Std. Deviation	9.896	9.146
Most Extreme Differences	Absolute	.142	.158
	Positive	.121	.158
	Negative	-.142	-.143
Test Statistic		.142	.158
Asymp. Sig. (2-tailed)		.200 ^{c,d}	.200 ^{c,d}

Based on the result, it show that the value of normality is higher than 0,05. So, it can be concluded the data is normal.

Table 4.4 Analysis of Homogeneity

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
3.254	4	9	.065

Based on the table, it shows that the data is homogeny because the significance value 0,065 is more than significance standard 0,05.

Then, this is result of vocabulary achievement by using word wall media in experiment class (VII b) and without using word wall media in control class (VII a), and to know the different score between pre-test and post-test.

a. Description About The Effectiveness of Students Vocabulary Using Word Wall Media In Pre-Test And Post-Test In The Experiment Class

The researcher conducted the English vocabulary test for the seven grade at MTs Ahasnul Huda Bahalayung 10th of Augustus and 7th of September in experiment class. The scoring is based on objective test score. More information about the scores can be seen in appendix 3.

To know the vocabulary achievement of students who use word wall media between pre-test and post-test at MTs Ahasnul Huda Bahalayung in academic year 2016/2017 the researcher uses the accounting of formula as follows:

1) Giving interpretation for “ t_o ” with consulting t table (“ t_{tabel} ”):

$$\begin{aligned} Df &= N - 1 \\ &= 19 - 1 \\ &= 18 \end{aligned}$$

2) Looking for standard Deviation for experiment Class by using the following formula:

$$S = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n-1}}$$

$$S = \sqrt{\frac{\sum 1680 - \frac{454832}{19}}{19-1}}$$

$$S = \sqrt{\frac{22259}{18}}$$

$$S = \sqrt{1236.611111111}$$

$$S = 35.1655$$

The post test using the same formula and get $S = 20,630$

3) looking for t_o , by using the following formula:

$$t = \frac{x1 - x2}{\sqrt{\frac{s1^2}{n1} + \frac{s2^2}{n2} - 2r\left(\frac{s1}{\sqrt{n1}}\right)\left(\frac{s2}{\sqrt{n2}}\right)}}$$

x1: mean of experimental group

x2: mean of controlling group

s1 s2: standard deviation 1 and 2

r: correlation

N: Subject

$$t = \frac{88.42 - 64.}{\sqrt{\frac{422,222,222}{19} + \frac{244,312,1704}{17} - 2(0,470)\left(\frac{20,548}{5,29150262}\right)\left(\frac{15,630}{5,29150262}\right)}}$$

$$t = \frac{23.58}{\sqrt{9.896 - 9.146}}$$

$$t = \frac{23.58}{\sqrt{750}}$$

$$t = 27.3861278753$$

Thus, $t_{count} = 27,34 > T_{table} 5\% = -1,70$. $-T_{count}$ is higher than $-T_{table}$. **H_o (Null Hypothesis) is rejected and H_a (Alternative Hypothesis) is accepted.** By this result, the researcher concludes that **H_o is rejected.**

As a result, there is significant difference effectiveness of using word wall media toward students vocabulary mastery in experiment class between pre-test and post-test in their vocabulary on seven grade at MTs Ahsanul Huda Bahalayung in academic year 2016/2017.

b. Description about the effectiveness of using word wall media toward students vocabulary without using word wall media in pre-test and post-test in the Experiment class.

The researcher conducted the English vocabulary test for the seven grade at MTs Ahsanul Huda 10th of August 2017 control class for pre test and for post test on 7th September 2017. The scoring is based on objective test score. More information about the scores can be seen in appendix 4.

To know the effectiveness of using word wall media toward students vocabulary who do not use word wall media between pre-test and post-test at seven grade at MTs Ahsanul Huda school year 2016/2017 the researcher uses the accounting of formula as follows:

1) Giving interpretation for “ t_o ” with consulting t table (“ t_{tabel} ”):

$$Df = N - 1$$

$$= 17 - 1$$

$$= 16$$

2) Looking for standard Deviation for experiment class by using the following formula:

$$S = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n - 1}}$$

$$S = \frac{\sum 454832 - \frac{239385^2}{17}}{17 - 1}$$

$$S = \sqrt{13.456.43775}$$

$$S = 34.683$$

The post test using the same formula and get $S = 19,389$

3) Looking for t_o , by using the following formula:

$$t = \frac{x_1 - x_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2} - 2r\left(\frac{s_1}{\sqrt{n_1}}\right)\left(\frac{s_2}{\sqrt{n_2}}\right)}}$$

$$t = \frac{88.42 - 64.82}{\sqrt{\frac{9.896^2}{19} + \frac{9.146^2}{17} - 2(0,374)\left(\frac{9.896}{\sqrt{19}}\right)\left(\frac{9.146}{\sqrt{17}}\right)}}$$

$$t = \frac{2360}{\sqrt{10,60998914 + 21,24369004 - 0,748(3,257)(4,609)}}$$

$$t = \frac{2360}{\sqrt{20,62506746}}$$

$$t = \frac{2360}{4,5414829582}$$

$$t = -6,526$$

Thus, $t_{count} = -6,526 < -T_{table} 5\% = -1,70$. T_{count} is lower than t_{table} . **H_o**

(Null Hypothesis) is accepted and H_a (Alternative Hypothesis) is rejected.

By this result, the researcher concludes that **H_o is accepted.**

As a result, there is no significant effectiveness of students using word wall media toward students vocabulary mastery for control class between pre-test and post-test on seventh grade at MTs Ahsanul Huda school 2016/2017.

c. Description about the effectiveness of using word wall media toward vocabulary mastery and without using word wall media in experiment class and control class

The researcher conducted the English vocabulary test for the seventh grade at MTsS Ahsanul Huda Bahalayung 10th of August, 23rd of August, 24st of August, 30th August, 31th of August, and 7th of September in experiment and control class. The scoring is based on objective test score.

Then total score of every students counted by Brown's formula so that the maximum score us 100. So, based on table above, it shows that the highest score of students who use word wall media 100 then, the lowest score is 70, and accumulative score is 1680. More information can be seen appendix 6.

Based on the result of the test, it is found that the categories of the vocabulary achievement of the students who use word wall media of the seventh grade at MTs Ahsanul Huda Bahalayung school year 2016/2017 are categorized in :

- a. Excellent category, 16 students (89,26%) with score 80-100
- b. Good category, 3 students (10,74%) with score 70-79
- c. Fairly category, 0 students (0%) with score 60-69
- d. Low category, 0 students (0%) with score 50-59
- e. Poor category, 0 students (0%) with score 0-49

Table 4.5. The frequency distribution of the influence who use word wall media toward vocabulary mastery students

No	Score	Frequency	Percentage	Categories
1	80-100	16	89,26%	Excellent
2	70-79	3	10,74%	Good
3	60-69	0	0%	Fair
4	50-59	0	0%	Low
5	0-49	0	0%	Poor
		19	100%	

To know the influence of using word wall media toward vocabulary mastery students who use word wall media at MTs Ahsanul Huda Bahalayung school year 2016/2017 the researcher use the accounting of mean formula as follow:

$$M_x = \frac{\sum f \times}{N}$$

$$M_x = \frac{1680}{19}$$

$$M_x = 88,421 \rightarrow 88,42$$

Thus the effectiveness of using word wall media toward vocabulary mastery of the seventh grade students at MTs Ahsanul Huda Bahalayung school year 2016/2017 can be concluded in excellent category. For the result of without using word wall media in control class can be seen in appendix 4.

The total score of every students was counted by using on Azwar's theory. So that the maximum score is 100, based on the table above, it show that the highest score of students who do not word wall media is 85 and then the lowest score is 45, and accumulative score is 1108. More information can be seen in appendix 6.

Based on the result of the test, it is found that the categories of the effectiveness of the students who do not using word wall media at seventh

grade of MTs Ahsanul Huda Bahalayung school year 2016/2017 are categorized in :

- a. Excellent category, 1 students (3,33%) with score 80-100
- b. Good category, 4 students (30,27%) with score 70-79
- c. Fair category, 9 students (55,93%) with score 60-69
- d. Low category, 2 students (7,14%) with score 50-59
- e. Poor category, 1 students (3,33%) with score 0-49

Table 4.6. The frequency distribution of the influence who do not use word wall media toward vocabulary mastery students

No	Score	Frequency	Percentage	Categories
1	80-100	1	(3,33%)	Excellent
2	70-79	4	30,27%	Good
3	60-69	9	55,93%	Fair
4	50-59	2	7,14%	Low
5	0-49	1	3,33%	Poor
		17	100%	

To know the effectiveness of students vocabulary who do not use word wall media on seventh grade students at MTs Ahsanul Huda Bahalayung school year 2016/2017 the researcher uses accounting of mean formula as follow:

$$M_x = \frac{\sum f \times}{N}$$

$$M_x = \frac{1108}{17}$$

$$M_x = 64,822 \rightarrow 64,82$$

Thus the effectiveness of students vocabulary who do not use word wall media on seventh grade at MTs Ahsnaul Huda Bahalayung school year 2016/2017 can be concluded in fair category.

Then the researcher counting the comparison between using word wall media and without using word wall media. To know the comparison of the writing skill between students who use and do not use word wall media, the researcher uses " t_{test} ". After that the collected data have been processed, the researcher analysis them make conclusion by using t_o formula: $t_o = \frac{M_1 - M_2}{SE_{M_1 - M_2}}$

2. Data Analysis

The researcher calculates the mean formula of each class. To keep the subject identity, the researcher just uses number of identifying the subject.

a. Looking for Mean Variable I by using the following formula:

$$M_x \text{ Or } M_1 = \frac{\sum fx}{N_1}$$

$$M_x \text{ Or } M_1 = \frac{1680}{19}$$

$$M_x \text{ Or } M_1 = 88,42$$

b. Looking for Mean variable II by using the following formula:

$$M_y \text{ Or } M_2 = \frac{\sum fy}{N_2}$$

$$M_y \text{ Or } M_2 = \frac{1108}{17}$$

$$M_y \text{ Or } M_2 = 64.82$$

c. Looking for standard deviation for variable 1 by using the following formula

The result of $\sum fx^2$ of variable I can be seen in appendix 3.

$$s = \sqrt{\frac{n \sum_{i=1}^n x_i^2 - (\sum_{i=1}^n x_i)^2}{n(n-1)}}$$

$$s = \sqrt{\frac{19(1722476) - (454832)^2}{19(19-1)}}$$

$$s = \sqrt{\frac{32727476 - 454832}{19(18)}}$$

$$s = \sqrt{\frac{32272644}{342}}$$

$$s = \sqrt{943641}$$

$$s = 9,896$$

d. Looking for standard Deviation for variable II by using the following formula:

The result of $\sum fx^2$ of variable II can be seen in appendix 3.

$$s = \sqrt{\frac{n \sum_{i=1}^n x_i^2 - (\sum_{i=1}^n x_i)^2}{n(n-1)}}$$

$$s = \sqrt{\frac{19(172247) - (454832)^2}{17(17-1)}}$$

$$s = \sqrt{\frac{3272693 - 454832}{17(16)}}$$

$$s = \sqrt{\frac{2817861}{272}}$$

$$s = \sqrt{823935965}$$

$$s = 9.146$$

e. Looking for Standard Error for Mean Variable I by using the following formula:

The result of standard error for mean variable I can be seen in appendix 5.

$$SE_{M_x} Or SE_{M_1} = \frac{SD_1}{\sqrt{n}}$$

$$SE_{M_x} Or SE_{M_1} = \frac{9896}{\sqrt{19}} = \frac{9896}{4359} = 2,270$$

f. Looking for Standard Error for Mean Variable II by using the following formula:

The result of standard error for mean variable I can be seen in appendix 5.

$$SE_y Or SE_{M_2} = \frac{SD_2}{\sqrt{n}}$$

$$SE_{M_y} Or SE_{M_2} = \frac{9146}{\sqrt{17}} = \frac{9146}{4123} = 2,218$$

- g. Looking for standard Error for comparative Mean Variable I and Mean variable II by using the following formula:**

$$SE_{M_1} - M_2 = \sqrt{SE_{M_1}^2 + SE_{M_2}^2}$$

$$SE_{M_1} - M_2 = \sqrt{2,270^2 + 2,218^2}$$

$$SE_{M_1} - M_2 = \sqrt{5.1529 + 4.919524}$$

$$SE_{M_1} - M_2 = \sqrt{10.072424} = 3.1737$$

- h. looking for t_o , by using the following formula:**

$$t_o = \frac{M_1 - M_2}{SE_{M_1} - M_2}$$

$$t_o = \frac{88,42 - 64,82}{3,17}$$

$$t_o = \frac{23,6}{3,17} = 7,445$$

- i. Giving interpretation for “ t_o ” with consulting t table (“ t_{tabel} ”):**

- Looking for Degree of Freedom

$$\frac{df}{db} = (N_1 + N_2 - 2)$$

$$\frac{df}{db} = (19 + 17 - 2) = 34$$

After the researcher found the df (degrees of freedom), which is 54, and then consult with t_{tabel} , can be seen in appendix 8.

- j. The researcher makes a conclusion.**

1) To know the effectiveness of using word wall media toward vocabulary mastery who use and do not use word wall media with the analysis below

a) H_a : students vocabulary who not use word wall media better than students use word wall media ($M_{x_1}) > (M_{x_2})$

b) Mean students' vocabulary who use word wall media:

$$M_{x_1} = 88.42$$

Mean students' vocabulary who do not use word wall media:

$$M_{x_2} = 64.82$$

c) So, students' vocabulary who use word wall media is better than student's vocabulary who do not use word wall media

- After that to know the differences effectiveness students' vocabulary between students who use and do not use word wall media of seventh grade at MTs Ahsanul Huda Bahalayung Consulting score of "db/df" with " t_{tabel} "

$$t_{tabel} = \text{Value of critic "t"}$$

- In significant degrees t table 5% = 2,00%
- In significant degrees t table 1% = 2,65%

- Making hypothesis interpretation:

- H_o (Null Hypothesis): there is no significant difference.

➤ H_a (Alternative Hypothesis): there is any significant difference.

➤ Consulting “ t_o ” with “ t_{table} ”

$$7,445 > 2,65$$

$$\frac{df}{db} = (N_1 + N_2 - 2)$$

$$\frac{df}{db} = (19 + 17 - 2) = 34$$

Thus, $t_{count} = 7,445 > t_{table} 5\% = 1,67$. T_{count} is higher than t_{table} . **H_o (Null Hypothesis) is rejected and H_a (Alternative Hypothesis) is accepted.** By this result, the researcher concludes that **H_a is accepted.**

As a result, there is significant effectiveness of using word wall media and do not use word wall media of the seventh grade students at MTs Ahsanul Huda Bahalayung school year 2016/2017.

To know the effectiveness or not using word wall media toward vocabulary mastery of the seventh grade students at MTs Ahsanul Huda Bahalayung using Gain test formula.

Gain test for measure the influence using word wall media toward vocabulary mastery of the seventh grade students at MTs Ahsanul Huda Bahalayung. The researcher measure influence by using following formula:

$$g = \frac{\text{score post test} - \text{score pre test}}{\text{score maximal} - \text{score pre test}}$$

The result of influence of using word wall media can be seen in appendix 9.

Note: Maximal score = 100

Students(n) = 19

$$g = \frac{\sum g}{n} = \frac{14.012407}{19} = 0,7374$$

Table 4.6. The categorized Gain Test score for measure effectiveness

Score	Category
$g < 0,3$	Low
$0,3 \leq g \leq 0,7$	Fair
$g > 0,7$	High

Based on table above, Value $g = 0,73474$. So, the researcher concludes that the effectiveness of using word wall media toward students vocabulary mastery of the seventh grade students at MTs Ahsanul Huda Bahalayung is High category. It's mean that media is effective for vocabulary student at MTs Ahsanul Huda Bahalayung.

Based interview result with the English teacher, that word wall media give effectiveness for vocabulary students and they are interesting in the process teaching and learning English, because its help them to remembering the vocabulary for their activity.

B. Discussion

From the statistical measurement above shows that H_a (Alternative Hypothesis) is Accepted and H_o is rejected, because Value of t_{count} is higher than of t_{table} , it means :

- “ in experiment class is significant effectiveness using word wall media between pre test and post test. Based on post test after use word wall media in experiment class, it can be concluded that are got score 80-100 is 16 students; score 60-80 is 3 students and mean of post test in experiment class is 88,42. It means that have effectiveness toward student vocabulary mastery can conclude in good category.”
- “in control class is not significant effectiveness without using word wall media toward students vocabulary mastery in control class. Based on post test without using word wall media in control class. It can be conclude that there are got score 40-60 is 12 students and 60-80 is 5 students. The mean of post test in control class is 64.82. it means that no effectiveness of using word wall toward students vocabulary in control class is Fair category.”
- “There is effectiveness in using word wall media toward students vocabulary mastery of the seventh grade at MTs Ahsanul Huda school year 2016/2017 high category of Gain Test with Value $g=0,73474..$ ”

The effectiveness of using word wall media toward students vocabulary for experiment class higher than control class. Therefore, the writer can conclude that using word wall media is better than without using word wall media. Based Mrs. Neneng Auliya Ramadhani,S.Pd as English teacher at MTs Ahsanul Huda, the teacher said in teaching and learning by using word wall media can help the teacher to answer the students problem in learning English at MTs Ahsanul Huda. Especially in vocabulary and also can proof this study, that the word wall can enrich and developing the students' vocabulary beside facilitate the students to memorize the word in the students course.

Each media has different strength and limitation in terms of the types of messages that can be recorded and displayed. It means that when selecting media formats, teacher have to give attention to instructional situation or setting, learner variable and the nature of the objective as well as the presentational capabilities of each of the media format.