CHAPTER IV
FINDINGS AND DISCUSSION

This chapter presents the data that was collected during the experimental research. First analysis focuses on the normality test and homogeneity test. And the second analysis was hypothesis test of the result of pre-test and post-test. It was done both in experimental and control group.

A. Profile of School

MTs Nahdlatul Muslimin Undaan Kudus is Islamic-based school that had built since 15th January 1969 by Institute of Darussalam. MTs Nahdltul Muslimin located in Undaan kidul village Undaan Kudus Regency. The vision of MTs Nahdlatul Muslimin is "The formation of learners becomes human being who has a good moral, intelligent and cultured according to the Islamic teaching of Ahlussunnah Wal-jamaah." While the missions of MTs Nahdlatul Muslimin are:

1. Providing learning to students who seek to establish a noble character.
2. Providing education to the development of upholding Islam of Ahlussunnah wal-Jama'ah to cultivate Islamic behavior in everyday life.

3. Guiding learners to explore and mastered of science and technology (Science and Technology) thoroughly and comprehensively.
4. Preparing students to participate in learning in further education unit or a higher level.
5. Provide learning to students to excel in the field of sports, the arts, and a variety of skills to the provision in the community.

The purposes of MTs Nahdlatul Muslimin:

1. The realization of the nation's children faith and fear of God Almighty.
2. The realization of the nation's children who think critically and have a good moral.
3. The realization of the nation's children who have the skills and knowledge as a comprehensive knowledge of human development.

B. Description and Research Finding

To find out the effectiveness of word wall to improve students' speaking skill in descriptive text at the eighth grade students of MTs Nahdlatul Muslimin Undaan Kudus, the writer did an analysis of quantitative data. After conducting the research, he got the data of research finding that is obtained by using the test of the experiment class and control class after conducting different treatment of learning process in both classes.

The implementation of this study was divided in two classes, namely the experiment class (VIII B) and the control class (VIII C). Before the activities were conducted, the writer determines the materials and lesson plan of learning. Learning in the experiment class was conducted by using word wall as the media and the control class using the conventional learning (without using word wall as media).

Test was given before and after the students follow the learning process that was provided by the writer. After the data were collected, the writer analyzed them to prove the truth of the hypothesis that had been formulated. However, before the analysis was done, first the writer scored the results of the test that had been given to the students. The questions that were given to students were oral test.

Before analyzing the data, first the writer knew the data from the beginning of control class and experiments class that is taken from the pre-test score. The initial score of the data control class and experimental class are on the attachment.

After the control class and the experiment class conducted the learning processes, then both classes were given a post-test to obtain the data that will be analyzed.

C. The Data Analysis and Test of Hypothesis

1. Analysis of Pre-test

The control group (VIII C) was given a pre-test on February 1, 2016 and also the experimental group (VIII B) was given a pre-test on February 2, 2016. They were asked to describe animals orally.

The result of pre-test was used to know if the class is normal or not and if the class is homogeneous or not, those are called by normality test and homogeneity test. The completed data was follows:

Table 4.1

The Value of Pre-Test of the Control and the Experiments classes

CONTROL CLASS			EXPERIMENT CLASS		
NO	**CODE**	**SKOR**	**NO**	**CODE**	**SKOR**
1	C-1	36	1	E-1	40
2	C-2	36	2	E-2	44
3	C-3	52	3	E-3	48
4	C-4	60	4	E-4	48
5	C-5	44	5	E-5	64
6	C-6	64	6	E-6	40
7	C-7	44	7	E-7	56
8	C-8	48	8	E-8	44
9	C-9	44	9	E-9	48
10	C-10	56	10	E-10	56
11	C-11	44	11	E-11	40
12	C-12	56	12	E-12	52

13	C-13	44	13	E-13	44
14	C-14	56	14	E-14	48
15	C-15	48	15	E-15	64
16	C-16	52	16	E-16	36
17	C-17	56	17	E-17	68
18	C-18	48	18	E-18	48
19	C-19	68	19	E-19	56
20	C-20	56	20	E-20	52
21	C-21	64	21	E-21	44
22	C-22	68	22	E-22	56
23	C-23	44	23	E-23	52
24	C-24	44	24	E-24	48
25	C-25	48	25	E-25	52
26	C-26	68	26	E-26	44
27	C-27	56	27	E-27	40
28	C-28	36	28	E-28	48
29	C-29	52	29	E-29	48
30	C-30	44	30	E-30	36
31	C-31	48	31	E-31	48
32	C-32	40	32	E-32	56
33	C-33	48	33	E-33	68
34	C-34	52	34	E-34	56
35	C-35	64	35	E-35	56
36	C-36	48	36	E-36	60

37	C-37	52	37	E-37	56
38	C-38	60	38	E-38	44
39	C-39	60	39	E-39	60
40	C-40	56	40	E-40	44
41	C-41	56	41	E-41	64
42	C-42	40	42	E-42	60
43	C-43	52	43	E-43	48
44	C-44	64	44	E-44	60
45	C-45	48	45	E-45	64
46	C-46	52	46	E-46	56
Sum		2376	Sum		2364
N		46	N		46
Average		51.65	Average		51.39
MIN		36	MIN		36
MAX		68	MAX		68
Variants (S^2)		74.54	Variants (S^2)		70.38
Standard Deviation		8.63	Standard Deviation		8.39

a. Test of Normality

Test of normality was used to find out whether data of control and experimental group which had been collected from the research come from normal distribution normal or not. The result computation of Chi-quadrate (χ^2_{count}) then was compared with table of Chi-quadrate (χ^2_{table}) by using 5% alpha of

significance. If $\chi^2_{count} < \chi^2_{table}$ meant that the data spread of research result distributed normally.

Table 4.2

Normality Test of Pre-Test of the Control Class

No	Class	Bk	Z_i	$P(Z_i)$	Ld	O_i	E_i	$\frac{(Oi - Ei)^2}{Ei}$
1	35 - 40	34.5	-1.987	0.4765	0.0748	5	3.4386	0.7090
2	41 - 46	40.5	-1.292	0.4018	0.1771	8	8.1469	0.0026
3	47 - 52	46.5	-0.597	0.2247	0.2638	15	12.134	0.6772
4	53 - 58	52.5	0.098	-0.0391	0.2470	8	11.364	0.9957
5	59 - 64	58.5	0.793	-0.2862	0.1454	7	6.6922	0.0142
6	65 - 70	64.5	1.488	-0.4316	0.0538	3	2.477	0.1104
		70.5	2.183	-0.4855				
Jumlah						46		2.5092

With $\alpha = 5\%$ and $df = 6 - 3 = 3$, from the chi-square distribution table, it is obtained χ^2_{table} is 7,81. Because χ^2_{count} (2.509) < χ^2_{table} (7,81), so the hypothetical sample of the control class is on the normal distribution.

Table 4.3

Normality Test of Pre-Test of the Experimental Class

No	Kelas	Bk	Z_i	$P(Z_i)$	Ld	O_i	E_i	$\frac{(Oi - Ei)^2}{Ei}$
1	35 - 40	34.5	-2.013	0.478	0.0751	6	3.453	1.8787

2	41 - 46	40.5	-1.298	0.4029	0.1828	7	8.4102	0.2365
3	47 - 52	46.5	-0.583	0.2201	0.2726	14	12.542	0.1696
4	53 - 58	52.5	0.132	-0.0526	0.2490	9	11.456	0.5264
5	59 - 64	58.5	0.847	-0.3016	0.1393	8	6.4087	0.3951
6	65 - 70	64.5	1.563	-0.4409	0.0477	2	2.1945	0.0172
		70.5	2.278	-0.4886				
Jumlah						46		3.2235

With $\alpha = 5\%$ and df = 6 – 3 = 3, from the chi-square distribution table, it is obtained χ^2_{table} is 7,81. Because χ^2_{count} (3,223) < χ^2_{table} (7,81), so the hypothetical sample of the control class is on the normal distribution.

Table 4.4

The normality result of Pre-test in Control and Experiment class

Class	χ^2_{count}	χ^2_{table}	Criteria
Control	2,509	7,81	Normal
Experimental	3,223	7,81	Normal

b. Test of Homogeneity

Test of homogeneity was done to know whether sample in the research come from population that had same variance or not. In this study, the homogeneity of the test was measured by comparing the obtained score (F_{count}) with F_{table} . Thus, if the obtained score

(F_{count}) was lower than the F_{table} or equal, it could be said that the H_0 was accepted. Its meant that the variance was homogeneous. The analysis of homogeneity test could be seen in table 4.5.

Table 4.5

The Homogeneity Result of Pre-test in Control and Experimental Class

Class	Variance	N	df	F_{count}	F_{table}	Criteria
Control	74,543	46	45	1,059	1.807	Homogen
Experimental	70,377	46	45			

By using $\alpha = 5\%$ and df numerator = 46 – 1 = 45, and df denominator 46 – 1 = 45, it was found F_{table} = 1,807. Since the F_{count} (1,059) < F_{table} (1,807) so H_0 was accepted meaning that both classes; class VIII B and class VIII C had similar variances or homogeneous.

c. The similarity test of average of the initial data between the experimental group and the control group.

Ho : $\mu_1 = \mu_2$

Ha : $\mu_1 \neq \mu_2$

Where:

μ_1 : Average data of Experimental group

μ_2 : Average data of Control group

Table 4.6

The Average Similarity Test of Pre-test in Control and Experimental Class

Variation Source	Control	Experimental	Criteria
Sum	2376	2364	Same
N	46	46	
Average	51.65	51.39	
Variance (S^2)	74.54	70.38	
Standar d. (S)	8.63	8.39	

The used formula:

$$t = \frac{\overline{X_1} - \overline{X_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

with:

$$S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n - 1)S_2^2}{n_1 + n_2 - 2}}$$

$$= \sqrt{\frac{(46-1)(70{,}377) + (46-1)(74{,}543)}{46 + 46 - 2}}$$

$$= \sqrt{\frac{3166{,}965 + 3354{,}435}{90}}$$

$$= \sqrt{\frac{6521{,}4}{90}}$$

$= \sqrt{72,46}$

$= 8,512$

So:

$$t = \frac{\overline{X_1} - \overline{X_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$= \frac{51,391 - 51,652}{8,512\sqrt{\frac{1}{46} + \frac{1}{46}}}$$

$$= \frac{-0,261}{8,512\sqrt{0,043}}$$

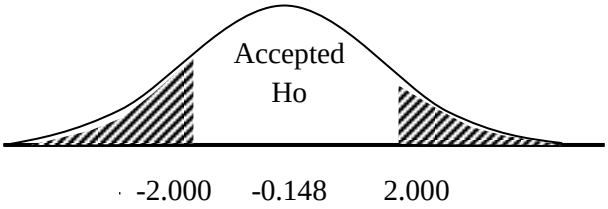
$$= \frac{-0,261}{8,512(0,207)}$$

$$= \frac{-0,261}{1,762}$$

$= - 0,148$

Based on the calculation above, on $\alpha = 5\%$ with df = 46 + 46 – 2 = 90, it is obtained $t_{count} = -0,148$ with $t_{table} = 2,000$ so it can be concluded that there was no difference of the pre-test average

from both samples, because t is at the reception area of Ho.



2. Analysis of Post-test

The control group (VIII C) was given a pre-test on February 20, 2016 and also the experimental group (VIII B) was given a pre-test on February 21, 2016. They were asked to describe animals orally. The completed data was follows:

Table 4.7

The Value of Post-Test of the Control and the Experiments classes

CONTROL CLASS			**EXPERIMENT CLASS**		
NO	**CODE**	**SKOR**	**NO**	**CODE**	**SKOR**
1	C-1	52	1	E-1	56
2	C-2	52	2	E-2	64
3	C-3	64	3	E-3	72
4	C-4	72	4	E-4	76
5	C-5	56	5	E-5	68
6	C-6	64	6	E-6	72

7	C-7	68	7	E-7	64
8	C-8	68	8	E-8	68
9	C-9	72	9	E-9	64
10	C-10	60	10	E-10	76
11	C-11	64	11	E-11	68
12	C-12	72	12	E-12	68
13	C-13	60	13	E-13	60
14	C-14	72	14	E-14	68
15	C-15	60	15	E-15	64
16	C-16	68	16	E-16	56
17	C-17	76	17	E-17	72
18	C-18	56	18	E-18	60
19	C-19	68	19	E-19	68
20	C-20	68	20	E-20	72
21	C-21	64	21	E-21	76
22	C-22	64	22	E-22	80
23	C-23	64	23	E-23	76
24	C-24	52	24	E-24	68
25	C-25	64	25	E-25	64
26	C-26	64	26	E-26	60
27	C-27	56	27	E-27	68
28	C-28	56	28	E-28	76
29	C-29	60	29	E-29	60
30	C-30	68	30	E-30	64

31	C-31	60	31	E-31	80
32	C-32	64	32	E-32	60
33	C-33	60	33	E-33	72
34	C-34	72	34	E-34	80
35	C-35	64	35	E-35	72
36	C-36	60	36	E-36	72
37	C-37	68	37	E-37	68
38	C-38	64	38	E-38	68
39	C-39	72	39	E-39	76
40	C-40	60	40	E-40	76
41	C-41	64	41	E-41	72
42	C-42	60	42	E-42	68
43	C-43	64	43	E-43	64
44	C-44	64	44	E-44	68
45	C-45	64	45	E-45	76
46	C-46	64	46	E-46	72
Sum		2928	Sum		3172
N		46	N		46
Average		63.66	Average		68.96
MIN		52	MIN		56
MAX		76	MAX		80
Variants (S^2)		32.587	Variants (S^2)		39.243
Standard Deviation		5.709	Standard Deviation		6.264

a. Test of Normality Test

It was same to test of normality in the pre-test. The result computation of Chi-Square (χ^2_{count}) then was compared with table of Chi-Square (χ^2_{table}) by using 5% alpha of significance. If $\chi^2_{count} < \chi^2_{table}$ meant that the data spread of research result distributed normally.

Table 4.8

Normality Test of Post-Test of the Control Class

NO	Class	Bk	Z_i	$P(Z_i)$	Ld	O_i	E_i	$\frac{(Oi - Ei)^2}{Ei}$
1	51 - 54	50.5	-2.304	0.4894	0.0438	3	2.0161	0.4802
2	55 - 58	54.5	-1.603	0.4456	0.1289	4	5.9315	0.6289
3	59 - 62	58.5	-0.903	0.3166	0.2366	9	10.885	0.3265
4	63 - 66	62.5	-0.202	0.08	0.2710	16	12.468	1.0006
5	67 - 70	66.5	0.499	-0.1911	0.2802	7	12.891	2.6920
6	71 - 74	70.5	1.2	-0.3848	0.1105	6	5.0832	0.1654
7	75 - 78	74.5	1.9	-0.4713	0.0240	1	1.1063	0.0102
		78.5	2.601	-0.4954				
Jumlah						46		5.3039

With α = 5% and df = 7 – 3 = 4, from the chi-square distribution table, it is obtained χ^2_{table} = 9.488. Because χ^2_{count} (5,304) < χ^2_{table} (9.488), so it is clear that the hypothetical sample of the control class is on the normal distribution. The more calculations can be seen on the attachment.

Table 4.9

Normality Test of Post-Test of the Experimental Class

No	Class	Bk	Z_i	$P(Z_i)$	Ld	O_i	E_i	$\frac{(Oi - Ei)^2}{Ei}$
1	55 - 58	54.5	-2.308	0.4895	0.0370	2	1.7035	0.0516
2	59 - 62	58.5	-1.669	0.4525	0.1038	5	4.7752	0.0105
3	63 - 66	62.5	-1.031	0.3487	0.1961	7	9.022	0.4532
4	67 - 70	66.5	-0.392	0.1525	0.2498	12	11.492	0.0224
5	71 - 74	70.5	0.246	-0.0973	0.3386	9	15.588	2.7842
6	75 - 78	74.5	0.885	-0.3119	0.1728	8	7.9483	0.0003
7	79 - 82	78.5	1.523	-0.4362	0.0485	3	2.2316	0.2646
		82.5	2.162	-0.4847				
Jumlah						46		3.5869

With $\alpha = 5\%$ and df = 7 – 3 = 4, from the chi-square distribution table, it is obtained $\chi^2_{table} = 9.488$ Because χ^2_{count} (3,587) < χ^2_{table} (9,488), so it is clear that the hypothetical sample of the experiment class is on the normal distribution.

Table 4.10

The normality result of Post-test in Control and Experiment class

Class	χ^2_{count}	χ^2_{table}	**Criteria**
Control	5,304	9.488	Normal
Experimental	3,587	9.488	Normal

b. Test of Homogeneity

Table 4.11

The Homogeneity Result of Post-test in Control and Experimental Class

Class	Varance	N	df	F_{count}	F_{table}	Criteria
Experimental	39,243	46	45	1,204	1.807	Homogen
Control	32,587	46	45			

By using $\alpha = 5\%$ and df numerator = 46 – 1 = 45, and df denominator 46 – 1 = 45, it was found F_{table} = 1,807. Since the F_{count} (1,204) < F_{table} (1,807) so H_0 was accepted meaning that both classes; class VIII B and class VIII C had similar variances or homogeneous.

c. The different test of average of the initial data between the experimental group and the control group.

After counting standard deviation and variance, it could be concluded that both group have no differences in the test of similarity between two variances in post-test score. So, to differentiate if the students' results speaking descriptive text in experimental and in control group after getting treatments were significant or not, the writer used t-test to test the hypothesis that had been mentioned in the chapter two. To see the difference between the experimental and control group, the writer used formula:

Ho: $\mu_1 \leq \mu_2$

Ha: $\mu_1 > \mu_2$

Where:

μ_1 : Average data of Experimental group

μ_2 : Average data of Control group

The used formula:

$$t = \frac{\overline{X_1} - \overline{X_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

with:

$$S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n - 1)S_2^2}{n_1 + n_2 - 2}}$$

$$= \sqrt{\frac{(46-1)(32{,}587) + (46-1)(39{,}243)}{46 + 46 - 2}}$$

$$= \sqrt{\frac{1466{,}435 + 1765{,}935}{90}}$$

$$= \sqrt{\frac{3232{,}37}{90}}$$

$$= \sqrt{35{,}91}$$

$$= 5{,}992$$

So:

$$t = \frac{\overline{X_1} - \overline{X_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$= \frac{68{,}957 - 63{,}652}{5{,}992\sqrt{\frac{1}{46} + \frac{1}{46}}}$$

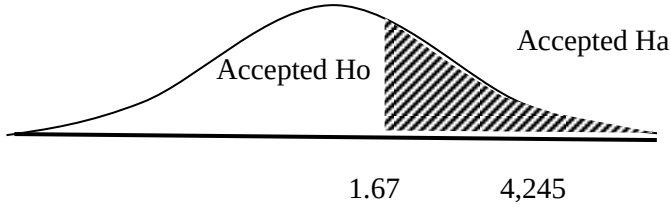
$$= \frac{-5{,}305}{5{,}992\sqrt{0{,}043}}$$

$$= \frac{5{,}305}{5{,}992\,(0{,}207)}$$

$$= \frac{5{,}305}{1{,}240}$$

$$= 4.245$$

After getting t-test result, then it would be consulted to the critical score of t_{table} to check whether the difference is significant or not. For a = 5% with df 46 + 46 - 2 = 90, it was found $t_{table} = 1{,}67$. Because of $t_{count} > t_{table}$, so it could be concluded that there was significance of difference between the experimental and control group. It meant that experimental group was better than control group after getting treatments.



D. Discussion

The data were obtained from the students' scores of the test of speaking descriptive text. They were pre-test and post-test scores from then experimental and control group. The average score for experimental group was 51.39 (pre-test) and 68.96 (post-test). The average score for control group was 51.65 (pre-test) and 63.66 (post-test).

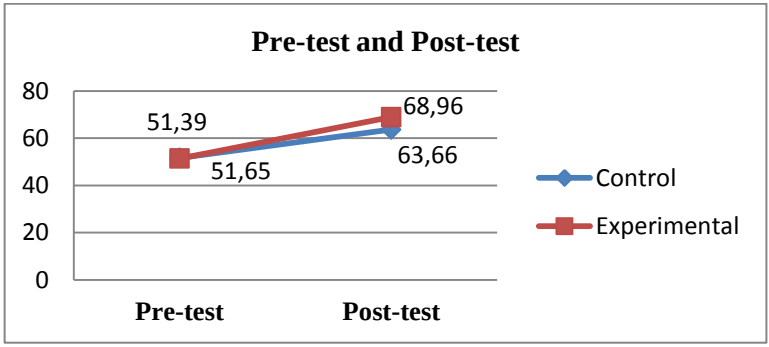
Since the obtained t-score was higher than the critical score on the table, the difference was statistically significance. Therefore, based on the computation there was a significance difference between the teaching speaking descriptive text using word wall and the teaching speaking descriptive text without word wall for eighth grade students of MTs Nahdlatul Muslimin Undaan Kudus. Teaching speaking descriptive text using word wall seemed to be more effective than teaching speaking descriptive text without word wall. It can be seen from the result of the test where the students taught speaking descriptive text by using word wall got higher scores than the students taught speaking descriptive text without word wall.

The following was the simple tables of pre-test and post-test students' average score.

Table 4.12

The Pre-test and Post-test Students' Average Scores of the Experimental and Control Group

NO	Group	The Average Percentage of Pre-test	The Average Percentage of Post-test
1	Experimental	51,39	68,96
2	Control	51,65	63,66



1. Students' Condition in Control Class

In the control class, students were taught by using conventional method, so, there were not new experience to students. Teacher used text as an aid in the teaching learning process. Students could not enjoy in speaking and explore their ideas. It was proven with the average of the control class in the post-test was 63,57 which was lower than the experimental class was 68,96. Although,

the average of the control class in the pre-test was 51,65 and the experimental class was 51,39.

2. Students' Condition in Experimental Class

   Before getting treatments, the students were geven the pre- test. In the pre-test, students' ability in speaking descriptive style was low. From the result of pre-test, it was known that students had many difficulties in describing animals. Their speech were influenced by Indonesian language. They used the wrong grammar and students' word choice (fluency) was also far from being perfect. To minimize the number of students' mistakes in their speech, the researcher gave correction to students' performance. From the correction of their mistakes, students' were supposed to learn more and improve their ability in speaking.

3. The Advantages and Disadvantages of Using word wall in Teaching Speaking descriptive Text

   a. The Advantages of Using word wall in Teaching Speaking descriptive Text. After conducting the research, there were some advantages of using word wall in Teaching Speaking descriptive Text:

      1) Word wall made learning becomes more interactive.

2) Word wall made learning becomes more active, because word wall help students to focus attention to the subject and make students active.
3) Word wall made students practice speaking easily. It will be very wasting time when the students only learn lots of descriptive text or learn how to make descriptive text without using it.
4) This media could be avoided students' boredom in learning speaking. The treatment made students interested in following the lesson. Word wall that gave students chance to show up their speaking in group could build their confidence to try to speak.

b. The Disadvantages of Using word wall in Teaching Speaking descriptive Text. They were described below:
1) It was not easy enough to manage the class, it caused by students very noisy when they practicing in the class and so their voice can disturb another class.
2) The class was too much students so that made lost control from the teacher controlled. Because, it too much groups

E. Limitation of the Research

Writer realizes that this research had not been done optimally. There were constraints and obstacles faced during the research process.

Some limitations of this research are:

1. Relative short of research time makes this research could not be done maximally.
2. The research was limited at MTs Nahdlatul Muslimin Undaan Kudus, so that when the same research is conducted in other schools, it is still possible that different result will be gained.
3. The implementation of the research process was less smooth; this was more due to lack of experience and knowledge of the writer.

Considering all those limitations, there is a need to do more research about the speaking of descriptive text using word wall as media so that the more optimal results will be gained.