CHAPTER IV

RESEARCH FINDING AND DISCUSSION

In this chapter, the researcher presents the finding and discussion that included of the description of data, the result of validity and reliability testing, the result of normality and homogeneity testing, hypothesis testing, and discussion.

A. Research Findings

This research was conducted at MTs Negeri 8 Tulungagung with population were all of eighth students of MTs Negeri 8 Tulungagung. There were 5 classes at eighth grade consisted of 136 students. The sample of this research was VIII Exellen class with consisted of 32 students as experiment and control class because the researcher was conducted pre experimental study so the researcher only used one class. This research used demonstration method to teach writing procedure text. This research was conducted on February 2019. The researcher used test to get data, those are pre-test and post-test.

1. The Data Before Using demonstration method

In this study, the researcher presented the data of students' score in pretest and posttest. In this case, the researcher wanted to know the effectiveness of using demonstration method to improve writing procedure text in MTs Negeri 8 Tulungagung. The effectiveness could be seen from the significant different score of students' score in swriting procedure text before and after being taught by using demonstration method. Here, the researcher conducted pre-test, giving treatment about procedure text by using demonstration method and

post-test. Before and after treatments the researcher done pre-test and post-test. Pre-test and post-test were done to obtain students' score in speaking.

Table 4.1 The Score's Criteria

No	Interval Class	Criteria
1.	85-100	Excellent
2.	71-84	Very Good
3.	60-70	Good
4.	40-59	Low
5.	0-39	Failed

(Adapted from article Riswanto and Haryanto E. 2012)

The scores were divided into five criterions. They were excellent, very good, good, low, and failed. The students categorized into excellent score if they got 85-100 score which means that they were able to speak very well. The students categorized into good score if they got 71-84 score which means that they were have a little doubt. In this category they were able to speak well. The students categorized into average score if they got 60-70 score which means that they were able to speak pretty well. The student categorized into poor score if they got 0-59 score which means that they need improvement. The last criteria were the students categorized into very poor score if they got 0-39 score which means that they could not speak well.

2. **The Data of Pre-Test**

After conducting pretest, the researcher obtained the data. The data were as follows:

Table 4.2 The Result of Students' Score in Pre-test

No	Subject	Pretest	Criteria score in Post-test
1	S1	60	Fair
2	S2	65	Fair
3	S3	50	Good
4	S4	75	Good
5	S5	50	Fair
6	S6	45	Fair
7	S7	70	Good
8	S8	50	Fair
9	S9	60	Good
10	S10	60	Good
11	S11	60	Good
12	S12	45	Fair
13	S13	70	Good
14	S14	50	Good
15	S15	45	Fair
16	S16	40	Fair
17	S17	55	Fair
18	S18	60	Good
19	S19	60	Good
20	S20	80	Excellent
21	S21	50	Good
22	S22	55	Fair
23	S23	75	Excellent
24	S24	40	Fair
25	S25	70	Excellent
26	S26	60	Good
27	S27	40	Fair
28	S28	45	Fair
29	S29	60	Good
30	S30	45	Fair
31	S31	40	Fair
32	S32	60	Good
Total		**1790**	

The researcher used SPSS 25 version to know the descriptive statistic and the percentage of students' score of pre-test. The percentage was divided into five criterions: excellent, good, average, poor, and very poor (see table 4.1) the result of the calculation as follows:

3. **Computation Result of The Students' Score Before Being Taught by Using Demonstration method (Pre-Test)**

The pre-test was given by asking students to write a procedure text about first day in junior high school. There were 32 students as the sample of research. Each student was given 30 minutes to write the procedure text. This test was intended to know the students' writing achievement before students got the treatment.

The statistics data of pre-test scores (Table 4.3) and frequency distribution of pre-test (Table 4.4) can be seen below:

Table 4.3 Statistics Data of Pre-test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
DATA PRE TEST	32	40	80	55,94	11,248
Valid N (listwise)	32				

Based on the table 4.2 above, we can be seen there were 32 students followed the pre-test. The mean of the students' score in pretest was 55.94. Then, the minimum score of pretest was 40, and the maximum score was 80.

The frequency of the students' score was presented in the following table below:

Table 4.4 Frequency of Score in Pretest

DATA PRE TEST				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	4	12,5	12,5	12,5
	45	5	15,6	15,6	28,1
	50	5	15,6	15,6	43,8
	55	2	6,3	6,3	50,0
	60	9	28,1	28,1	78,1
	65	1	3,1	3,1	81,3
	70	3	9,4	9,4	90,6
	75	2	6,3	6,3	96,9
	80	1	3,1	3,1	100,0
	Total	32	100,0	100,0	

The table 4.3 showed the frequency distribution of pre-test by considering on qualification of criteria students' scores:

a. There are 4 students got score 40, it means that the students' writing achievement was poor and the students still needed much improvement.

b. There are 21 students got 45-60, it means that the students' writing achievement was still fair, it also needed the improvement.

c. There are 7 students got 65-80, it means the students' writing achievement was good.

After knowing the result of pre-test, the researcher gave the treatment in order to the students' writing achievement could be increased. Then, the

researcher gave post-test to measure the different scores after conducting the treatment.

4. **The Data of Post-Test**

After conducting posttest, the researcher obtained the data. The data were as follows:

Table 4.5 The Result of Students' Score in Pre-test

No	Subject	Post test	Criteria score in Post-test
1	S1	60	Fair
2	S2	65	Fair
3	S3	65	Good
4	S4	80	Good
5	S5	55	Fair
6	S6	60	Fair
7	S7	80	Good
8	S8	55	Fair
9	S9	70	Good
10	S10	80	Good
11	S11	70	Good
12	S12	50	Fair
13	S13	75	Good
14	S14	70	Good
15	S15	50	Fair
16	S16	55	Fair
17	S17	60	Fair
18	S18	70	Good
19	S19	75	Good
20	S20	85	Excellent
21	S21	70	Good
22	S22	60	Fair
23	S23	85	Excellent
24	S24	45	Fair
25	S25	85	Excellent
26	S26	70	Good

27	S27	50	Fair
28	S28	60	Fair
29	S29	70	Good
30	S30	50	Fair
31	S31	55	Fair
32	S32	75	Good
Total		**2105**	

The researcher used SPSS 25 version to know the descriptive statistic and the percentage of students' score of pre-test. The percentage was divided into five criterions: excellent, good, average, poor, and very poor (see table 4.1) the result of the calculation as follows:

5. **Computation Result of The Students' Score After Being Taught by Using Project Based Learning (Post-Test)**

The post test was given by asked the students to write a procedure text about unforgettable experience. The allocation time was 60 minutes. There were 32 students as the sample of the research. The post-test was done after being treatment by using Demonstration Method. This test was intended to know the the students reading achievement after being taught using Demonstration Method.

The statistics data of pre-test scores (Table 4.4) and frequency distribution of pre-test (Table 4.5) can be seen below:

Table 4.6 Statistics Data of Post-test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
DATA POST TEST	32	45	85	65,78	11,578
Valid N (listwise)	32				

Based on the table 4.4 above, we can be seen there were 32 students followed the post-test. The mean of the students' score in post-test was 65.45. The minimum score was 45, and the maximum score was 85.

Then, the frequency of the students' score was presented in the following table below.

Table 4.7 Frequency of Score in Post-test

DATA POST TEST				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	45	1	2,1	3,1	3,1
	50	4	8,3	12,5	15,6
	55	4	8,3	12,5	28,1
	60	5	10,4	15,6	43,8
	65	2	4,2	6,3	50,0
	70	7	14,6	21,9	71,9
	75	3	6,3	9,4	81,3
	80	3	6,3	9,4	90,6
	85	3	6,3	9,4	100,0
	Total	32	66,7	100,0	
Missing	System	16	33,3		
Total		48	100,0		

From the table 4.5, it can be seen the frequency of post-test after being distributed showed based on the criteria students' score:

a. There are 14 students got score 45-60, it means that the students' writing achievement in procedure text was fair. There is no student got poor score.

b. There are 15 students got score 65-80, it means that the students' writing achievement in procedure text was good.

c. There are 3 students got score 85, it means that the students' writing achievement in procedure text was excellent.

6. Computation the Descriptive Statistics of Pre-test and Post-test

After that, the writer organized the range, minimum, maximum, mean, standard deviation, and variances of pretest and posttest scores of the sample which calculated respectively by using IBM SPSS Statistics 25 Table 4.6 represents the result:

Table 4.8 Descriptive Statistic for Pre-test and Post-test

Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
DATA PRE TEST	32	40	40	80	55,94	11,248	126,512
DATA POST TEST	32	40	45	85	65,78	11,578	134,047
Valid N (listwise)	32						

Table 4.4 showed that the minimum score in pre-test was 40, while in post-test was 45. Then, the maximum score in pre-test was 80, while in post-test was 85. The range of pre-test and post-test is the same, it was 40. The range of data was the distance between the highest score and the lowest score. The standard deviation of pre-test was 11.233 and post-test was 11.549. The standard deviation is to measure how much the variance of the sample. If the standard deviation is getting higher than the mean, it means the mean is not homogeny. While, if the standard deviation is getting smaller than the mean, it means that the mean was

homogeny. The standard deviation of pre-test was 11.248< 55.94 and post-test was 11.578<65.78. So, the sample of this research almost homogeny or has the same mean.

Based on the result of pre-test and post-test, it has different students' score before and after taught demonstration method. The mean of post-test was (65.78) higher than the mean of pre-test (55.94). It means, the use of demonstration method has caused to the improvement of students' scores. So, it can be concluded that the value increased after being treatment use demonstration method in writing procedure text.

Table 4.9 The result of pretest and post-test

No	Subject	Pretest	Post test	Gained score	Criteria score in Post-test
1	S1	60	60	0	Fair
2	S2	65	65	0	Fair
3	S3	50	65	15	Good
4	S4	75	80	5	Good
5	S5	50	55	5	Fair
6	S6	45	60	15	Fair
7	S7	70	80	10	Good
8	S8	50	55	5	Fair
9	S9	60	70	10	Good
10	S10	60	80	20	Good
11	S11	60	70	10	Good
12	S12	45	50	5	Fair
13	S13	70	75	5	Good
14	S14	50	70	20	Good
15	S15	45	50	5	Fair
16	S16	40	55	15	Fair
17	S17	55	60	5	Fair
18	S18	60	70	10	Good
19	S19	60	75	15	Good
20	S20	80	85	5	Excellent

21	S21	50	70	20	Good
22	S22	55	60	5	Fair
23	S23	75	85	10	Excellent
24	S24	40	45	5	Fair
25	S25	70	85	15	Excellent
26	S26	60	70	10	Good
27	S27	40	50	10	Fair
28	S28	45	60	15	Fair
29	S29	60	70	10	Good
30	S30	45	50	5	Fair
31	S31	40	55	15	Fair
32	S32	60	75	15	Good
Total		**1790**	**2105**	**315**	

There were 32 students as subjects or respondents of the research. Based on the table 4.1, it can be seen the highest and the lowest scores of the students. The highest score of pre-test was 80 and the lowest score of pre-test was 40. While, the highest score of post-test was 85 and the lowest score of post-test was 50.

After got the pre-test and post-test score, the writer used IBM SPSS 25 to organize the descriptive statistics data and frequency of score.

B. Hypothesis Testing

After the data were collected, the hypothesis testing was needed. Before being tested, a requirement test was conducted to find out what the technique it could be used or not, while the requirements were:

1. Instrument Testing

a. Validity Testing

Before the researcher gave the test to VIII A class, the test that will be used must be proven validity. Therefore the

researcher used expert validity. Expert validity were English lecturer and English teacher of MTsN 8 Tulungagung, they were:

(1) Faizatul Istiqomah, M.Ed (English lecturer of IAIN Tulungagung)

(2) Mulyono, S.Pd (English teacher)

According to expert validity, the result of Faizatul Istiqomah, M.Ed the test was feasible to use with revision. She gave commend the item for test should be specific. The result of Mulyono, S.Pd the test was feasible to use.

Table 4.10 The data of VIII A class

No	Name	Try out's Score
1	S1	49
2	S2	69
3	S3	45
4	S4	83
5	S5	55
6	S6	42
7	S7	64
8	S8	68
9	S9	72
10	S10	59
11	S11	62
12	S12	56
13	S13	80
14	S14	80
15	S15	52
16	S16	69
17	S17	62
18	S18	80
19	S19	70
20	S20	77
21	S21	64

22	S22	57
23	S23	75
24	S24	67
25	S25	65
26	S26	60

From the table 4.8 above, it showed that the minimum score of try out was 42, and the maximum score of try out was 83. The respondent of try out's class was VIII A consisted of 26 students. The following are the results of calculation of validity of the test that could be seen in table 4.9 below.

Table 4.11 The Result of Validity Testing

		Content	Fluency	Vocabulary	Pronunciation	Grammar	Total
Correlations							
Content	Pearson Correlation	1	.794**	.395*	.402*	.195	.874**
	Sig. (1-tailed)		.000	.023	.021	.170	.000
	N	26	26	26	26	26	26
Fluency	Pearson Correlation	.794**	1	.486**	.614**	.271	.930**
	Sig. (1-tailed)	.000		.006	.000	.090	.000
	N	26	26	26	26	26	26
Vocabulary	Pearson Correlation	.395*	.486**	1	.237	.168	.645**
	Sig. (1-tailed)	.023	.006		.122	.206	.000
	N	26	26	26	26	26	26
Pronunciation	Pearson Correlation	.402*	.614**	.237	1	.228	.633**
	Sig. (1-tailed)	.021	.000	.122		.131	.000
	N	26	26	26	26	26	26
Grammar	Pearson Correlation	.195	.271	.168	.228	1	.395*
	Sig. (1-tailed)	.170	.090	.206	.131		.023

	N	26	26	26	26	26	26
Total	Pearson Correlation	.874**	.930**	.645**	.633**	.395*	1
	Sig. (1-tailed)	.000	.000	.000	.000	.023	
	N	26	26	26	26	26	26

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

From table 4. 9 showed that tests were valid, with compare the r_{count} (Pearson Correlation) was higher than r_{table} with the number of respondents 26 students and the significance level 5% was 0.374. So, all of tests were valid.

b. Reliability Testing

Reliability test was used to find out whether the items tested were reliable in giving the results of students learning measurement or not. To test the reliability of instrument, the researcher used the *Alpha Cronbach* Method.

Table 4. 11 The Result of Reliability Testing

Case Processing Summary

		N	%
Cases	Valid	26	100.0
	Excluded[a]	0	.0
	Total	26	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.781	6

Based on table 4.10 *reliability Statistics,* the result of *Cronbach's Alpha* was 0.781. So, the test was reliable.

2. Requirement Testing

a. The result of normality testing

Normality is conducted to determine whether the gotten data is normal distribution or not. The researcher used SPSS IBM 25 *One Sample Kolmogrov-Smirnove test* by the value of significance (α) =0.05. The result can be seen in the table below:

Table 4.12 Normality testing

One-Sample Kolmogorov-Smirnov Test		DATA PRE TEST	DATA POST TEST
N		32	32
Normal Parameters[a,b]	Mean	55,94	65,78
	Std. Deviation	11,248	11,578
Most Extreme Differences	Absolute	,141	,142
	Positive	,140	,129
	Negative	-,141	-,142
Test Statistic		,141	,142
Asymp. Sig. (2-tailed)		,106[c]	,099[c]
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			

Based on the table above was known that the significant value of pretest was 0.106, it was bigger than 0.05 (0.106>0.05), it means the distribution data of pre-test is normal. The significance value of post-test was 0.099, it was bigger than 0.05 (0.099>0.05), it means the

distribution data of post-test was normal. So, it can be interpreted that both of data (pre-test and post-test score) are in normal distribution.

b. The result of Homogeneity testing

Homogeneity testing is conducted to know whether the gotten data has a homogeneous variance or not. The researcher used Test of Homogeneity of variances with SPSS by the value of significance (α) = 0.05. And the result can be seen below:

Table 4.13 Homogeneity Testing

Test of Homogeneity of Variances		Levene Statistic	df1	df2	Sig.
HASIL	Based on Mean	,101	1	62	,752
	Based on Median	,093	1	62	,761
	Based on Median and with adjusted df	,093	1	61,983	,761
	Based on trimmed mean	,101	1	62	,752

The data can be said has same variance or homogeny if the value is more than 0.05. Based on the table above the significant value was 0.752. It means that sig/p value 0.156 was higher than 0.05 (0.752>0.05). Automatically, it can be said that the data has same variance or can be said homogeny.

C. Hypothesis Testing

1. $H_o = \mu_1 \leq \mu_2$ or the mean of the pre-test is smaller than or equal to the mean of the post-test.

Null hypothesis of this research was the score of students in writing procedure text after being taught by using demonstration method was less than or equal to their scores before being taught using demonstration method to the eighth grade of MTs Negeri 8 Pucanglaban.

2. $H_1 = \mu_1 > \mu_2$ or the mean of post-test was higher than the mean of pre-test.

Alternative Hypothesis (H_a) of this research was the score of students in writing procedure text after being taught by demonstration method was higher than their score before being taught using silent viewing to the eighth grade of MTs Negeri 8 Pucanglaban.

To know whether the post-test's score was higher than pre-test score before and after using demonstration method, the researcher computed *paired-sample test* by using SPSS 25.0 Version. The output was as follow:

Table 4.14 Paired Sample Correlation

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRETEST & POSTTEST	32	.880	.000

Based on the table 4.9 above, it showed the correlations between two scores of pre-test and post-test. The correlation scores of pre-test and post-test was 0.880 and significance value was 0.000. It shows that sig.value was smaller than 0.05 (0.00<0.05), it means that H_o was rejected and H_a was accepted. So, it can be

concluded that there was significant different score between pre-test and post-test

score.

Table 4.10 showed the result of calculation Paired Sample Test as follow:

Table 4.15 Paired Sample T-Test

Paired Samples Test

			Paired Differences						Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	T	df	
Pair 1	PRETEST – POSTTEST	-9.843 75	5.60593	.99100	-11.86490	-7.82260	-9.933	31	.000

Based on the table 4.10, output paired samples statistic showed that the

result of compare analysis with using T-test. It shows the mean of pre-test and

post-test is 9.843 which means that the difference mean between two scores was

9.843. The standard deviation is 5.605; it shows the variation of the data, the

smaller value of it, the closer of data was. The standard error mean is 0.991, it

describes the accuracy as an estimate of the population mean, the smaller of

standard error value is better the sample was because its represent the population

enough. The lower difference is 11.864, while upper difference is 7.822. The

result of T test= (9.933) with df= 31 and significant value=(0.000).

The way to test the null hypothesis can be rejected was by comparing

sig.value with the standard level of significance (0.05). From the Table 4.10,

sig.value is smaller than 0.05 (0.00<0.05). Thus, it was proven that the null hypothesis could be rejected.

3. Discussion

The objective of this research is to find whether there is any significance different scores' of students' achievement in writing recount text or not. To prove it, the writer used writing test as instruments. The writer used three steps to get the data; pre-test, treatment, and post-test. To know the result of this research whether this strategy is effective or not, the researcher computed both of the tests into SPSS 25 version software.

From the analysis above, the criteria to test the hypothesis of this research which is use in SPPS 25 were:

a. If sig.value <0.05, the null hypothesis (H_o) is rejected, while the alternative hypothesis (H_a) is accepted.

b. If sig.value >0.05, the null hypothesis (H_o) is accepted, while the alternative hypothesis (H_a) is rejected.

Based on the Table 4.15 above, the significance value of the research was 0.000, and significance level is 0.05. It means that the alternative hypothesis (H_a) was accepted and the null hypothesis (H_o) was rejected. It can be inferred that here was significant difference on students' writing procedure text achievement before and after being taught by using Project Based Learning at the eighth grade of MTsN 8 Tulungagung. So, teaching writing procedure text using project based learning was effective

As the requirement of hypothesis, if the significance value is smaller than significance level (0.05), it means that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected. In fact, based on the table of *paired sample t-test,* the result shows that the number of significance value is 0.000 at significance level 0.05. It means there is a significance difference between pre-test and post-test. It can be said that there is any significance difference score on the students' writing achievement before and after being taught by using demonstration method.

From the finding, it can be seen that demonstration method can increase students' achievement in writing. The mean of pre-test 55.61 becomes 65.45 in post-test. It indicates that after using demonstration, the students' achievement in writing significantly increased proven by the progress of score from pre-test and post-test.

Regarding on the result of data analysis above, it was also strongly with previous study as stating that silent viewing activity was considered as an effective technique toward students' ability in writing. The first study conducted by Yusrida and Masitowarni siregar (2013) with the title *"The Effect Of Using Demonstration Method On The Students' Achievement In Writing Procedure Text"* in this research it can be conclude that demonstration method require students to write procedure text by using demonstration method. This technique can motivate the students more active and easy to understand.

The second study from Firda amalia. (2016) with the title "The Effect Of Demonstration Techniqueon Students' Writing Of Procedure Text*"* in this

research it can be conclude that demonstration method is a easy method to teach writing procedure text and improve the students ability in writing.

The another study from M.Miftahul Huda (2015) under the title, *"Improving Students' Ability In Writing Procedure Text Through Demonstration"* he found that Teaching writing procedure text using demonstration can be enjoyable for both teacher and students. In fact, students can improve their writing procedure text after being taught using demonstration.

As a result, demonstration technique promotes the learning process which facilitates students to practice their writing confidently. Demonstration technique makes students take a part in the class learning process and helps them to balanced their own types of learning such as auditory, visual and kinesthetic.

Based on the implementation above, it can be summed up that using demonstration technique is effective to improve students' writing procedure text, especially for the eighth grade students at MTsN 8 Tulungagung.