CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

In this chapter, the reseacher presents about the description of data, hypothesis testing, and also discussion based on the result of the research.

A. THE DESCRIPTION OF DATA

In this part, the researcher presented the students' writing achievement on recount text between the students who are taught by using Google Docs and those who are taught by using group investigation. To investigate the students' ability in writing, the researcher conducted pre test and post test for both of classes, class VIII C as control class and class VIII A as experimental class. In experimental class pre-test given before being taught by applying Google Docs. And in control class pre-test given before being taught by applying group investigation. The students' writing ability is scored using analytical scoring rubric.

The data of this research consisted of pretest score and post test score of contol and experimental class. Those were explained as follows :

1. Pre-test Score of Control and Experimental Classes

Pre –test is test that given before doing treatment. It means that, in experimental class learning activity using Google Docs while in control class learning activity using group investigation. Before the researcher

gave the treatment, the reseracher gave a pre-test for the control and experimental classes. For detail explanation about data pre-test, it could be seen in the explanation below :

Table 4.1 Pre-test Score of Control and Experimental Classes

Number	Subject	Control Class	Experimental Class
1.	AAD	60	75
2.	ADS	75	60
3.	AAA	65	70
4.	BRA	80	60
5.	EAR	70	75
6.	EA	85	70
7.	EBK	80	70
8.	FDA	80	85
9.	FF	85	55
10.	FN	80	80
11.	FDP	85	75
12.	HK	65	85
13.	JS	65	75
14.	LAA	60	65
15.	MW	65	70
16.	P	55	75
17.	RDA	75	65
18.	RG	60	70

19.	RAS	70	80
20.	RP	70	70
21.	RAH	60	80
22.	RDM	80	55
23.	RBS	60	75
24.	SAM	85	75
25	WDA	55	70
26.	Y	60	75

Table 4.1 showed that scores of pre test in control and experimental classes taken by 26 students. Every students had different scores based on their writing ability. In control and experimental classes, the highest score was 85 and the lowest score was 55. For the result of statistic calculation of pre test scores by using SPSS 16.0 version for windows could be seen in the table below :

Table 4.2 Statistical Analysis of Pre-test in Control and Experimental Classes

Statistics

		Control	Experimental
N	Valid	26	26
	Missing	0	0
Mean		70.38	71.54
Std. Error of Mean		1.999	1.563
Median		70.00	72.50

Mode	60	75
Std. Deviation	10.190	7.971
Variance	103.846	63.538
Range	30	30
Minimum	55	55
Maximum	85	85
Sum	1830	1860

Table 4.2 showed that there were 26 students took pre-test in control and experimental classes. The mean score of pre-test in control class was 70.38 and in experimental class was 71.54. The median score in control class was 70 and in experimental class was 72.5. The mode of the score in control class was 60 and in experimental class was 75. The standard deviation of score in control class was 10.190 and in experimental class was 7.971. The frequencies of the students' scores of pre-test in control and experimental classes were presented in the following table :

Frequency of Students' Pre-test in Control and Experimental Classes

1.3 . Frequency of Students' Pre-test in Control Class

Control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55	2	7.7	7.7	7.7
	60	6	23.1	23.1	30.8
	65	4	15.4	15.4	46.2

	Frequency	Percent	Valid Percent	Cumulative Percent
70	3	11.5	11.5	57.7
75	2	7.7	7.7	65.4
80	5	19.2	19.2	84.6
85	4	15.4	15.4	100.0
Total	26	100.0	100.0	

The table of 4.3 showed that 2 students got 55 score, 6 students got 60 score, 4 students got 65 score, 3 students got 70 score, 2 students got 75 score, 5 students got 80 score, and 4 students got 85 score. Total of students were 26.

4.4 Frequency of Students' Pre-test in Experimental Class

Pre-test Experimental Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55	2	7.7	7.7	7.7
	60	2	7.7	7.7	15.4
	65	2	7.7	7.7	23.1
	70	7	26.9	26.9	50.0
	75	8	30.8	30.8	80.8
	80	3	11.5	11.5	92.3
	85	2	7.7	7.7	100.0
	Total	26	100.0	100.0	

The table of 4.4 showed that 2 students got 55 score, 2 students got 60 score, 2 students got 65 score, 7 students got 70 score, 8 students got 75

score, 3 students got 80 score, and 2 students got 85 score. Total of the students were 26.

Histogram Pre-Test

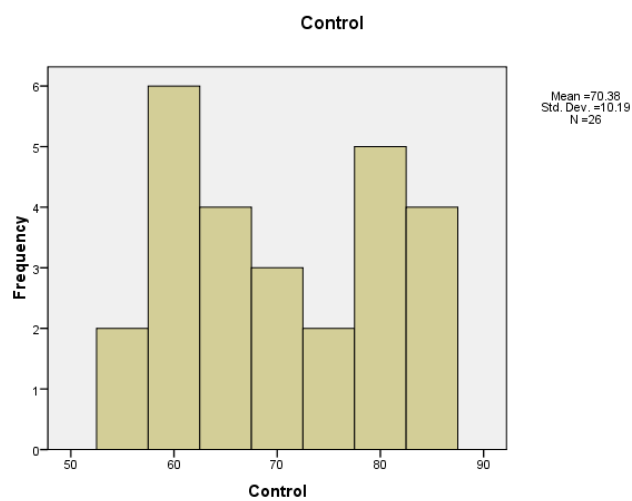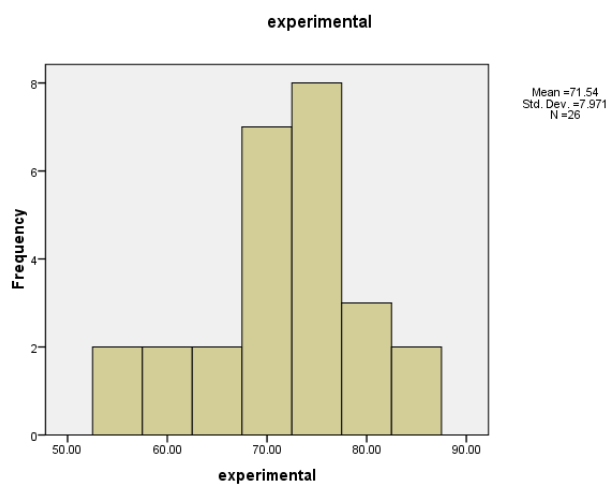**Figure 4.1 Histogram of Pre-Test in Control Class**

Figure 4.2 Histogram of Pre-Test in Experimental Class

2. Post Test Score of Control and Experimental Classes

Post test is a test that given after doing treatment. It means that, in experimental class after learning activity by using Google Docs collaborative writing activity while in control class after learning activity by using group investigation. For detail explanation about data post test, it could be seen in the explanation below :

Table 4.5 The Students' of Post Test Score in Control and Experimental Classes

Number	Subject	Control Class	Experimental Class
1.	AAD	60	80
2.	ADS	80	60
3.	AAA	75	75
4.	BRA	75	75
5.	EAR	80	75
6.	EA	75	75
7.	EBK	75	80
8.	FDA	75	90
9.	FF	85	55
10.	FN	80	80
11.	FDP	75	80
12.	HK	75	90
13.	JS	70	75
14.	LAA	75	65
15.	MW	75	80

16.	P	50	75
17.	RDA	75	75
18.	RG	65	75
19.	RAS	65	90
20.	RP	70	75
21.	RAH	60	85
22.	RDM	80	60
23.	RBS	60	80
24.	SA	90	85
25	WDA	70	75
26.	Y	60	75

Table 4.5 showed that scores of post test in control and experimental classes taken by 26 students. Every students had different scores based on their writing ability. The highest score in two classes was 90 and the lowest score was 50 in control class and 55 scores in experimental class. For the result of statistic calculation of pre test scores by using SPSS 16.0 version for windows could be seen in the table below :

Table 4.6 Statistical analysis of Post test

Statistics

		experimental	Control
N	Valid	26	26
	Missing	0	0
Mean		76.3462	72.1154
Std. Error of Mean		1.72220	1.75791
Median		75.0000	75.0000

Mode	75.00	75.00
Std. Deviation	8.78154	8.96360
Variance	77.115	80.346
Range	35.00	40.00
Minimum	55.00	50.00
Maximum	90.00	90.00
Sum	1985.00	1875.00

Table 4.6 showed that there were 26 students took post test in control and experimental classes. The mean score of post test in control class was 72.1154 and in experimental class was 76.3462. The median score both of class was 75.000. The mode of the score in control and experimental classes were same, it was 75.00. The standard deviation of score in control class was 8.96360 and in experimental class was 8.78154. The frequencies of the students' scores of the post test in control class were presented in the following table.

Table 4.7 Frequency of Students' Post Test Score in Control and Experimental Classes

Post Test Control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	1	3.8	3.8	3.8
	60	4	15.4	15.4	19.2
	65	2	7.7	7.7	26.9
	70	3	11.5	11.5	38.5

			Valid	Cumulative
	Frequency	Percent	Percent	Percent
75	10	38.5	38.5	76.9
80	4	15.4	15.4	92.3
85	1	3.8	3.8	96.2
90	1	3.8	3.8	100.0
Total	26	100.0	100.0	

The table of 4.7 showed that 1 students got 50 score, 4 students got 60 score, 2 students got 65 score, 3 students got 70 score, 10 students got 75 score, 4 students got 80 score, 1 students got 85 score, and 1 students got 90 score. Total of the students were 26.

Post Test Experimental

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55	1	3.8	3.8	3.8
	60	2	7.7	7.7	11.5
	65	1	3.8	3.8	15.4
	75	11	42.3	42.3	57.7
	80	6	23.1	23.1	80.8
	85	2	7.7	7.7	88.5
	90	3	11.5	11.5	100.0
	Total	26	100.0	100.0	

The table above showed that 1 students got 55 score, 2 students got 60 score, 1 students got 65 score, 11 students got 75 score, 6 students got 80 score, 2 students got 85 score, and 3 students got 90 score. Total of the students were 26.

Histogram of Post Test

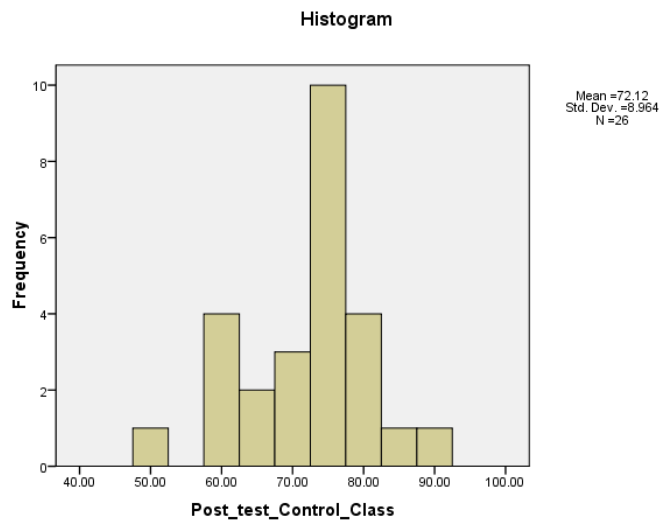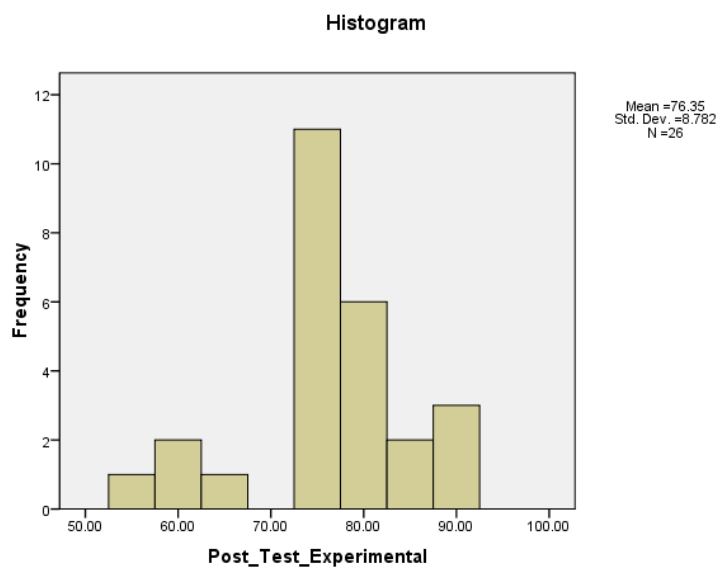**Figure 4.3 Histogram of Post Test in Control Class**

Histogram

Mean =72.12
Std. Dev. =8.964
N =26

Figure 4.4 Histogram of Post Test in Experimental Class

Histogram

Mean =76.35
Std. Dev. =8.782
N =26

B. HYPOTHESIS TESTING

To know hypothesis testing was rejected or accepted, the researcher calculate used SPSS 16.0 version for windows. In this research, to determine hypothesis testing the researcher only used pos test data because in chapter III had explained that pre-test data was equal. In analyze data, the researcher used T-test to know the result of hypothesis testing because the data was interval and the result of normality testing showed that the data of post test in control and experimental classes was not normally distributed.

The hypothesis testing of this research are as follow :

1. If the significance level is bigger than 0.05 (α = 5%), the alternative hypothesis (Ha) is rejected and null hypothesis (H0) is accepted.

   It means there is no different score of students achievement on writing recount text between the students who were taught by using Google Docs and those who were taught by using group investigation.

2. If the significance level is smaller than 0.05 (α = 5%), the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted.

   It means that there is different score of students achievement on writing recount text between the students who were taught by using Google Docs and those who were taught by using group investigation.

   To know whether the significance level, the researcher calculated the data by using SPSS 16.0 version for windows.

Table 4.8 The Result of Hypothesis Testing

Test Statistics^a

	Score
Mann-Whitney U	240.500
Wilcoxon W	591.500
Z	-1.856
Asymp. Sig. (2-tailed)	.064

a. Grouping Variable

From table above could be made interpretation that z-value was -1.856 with *p*-value 0.064 (2-tailed). Because in this research used one right-tailed test, so the *p*-value has to divided into two. Thus, 0.064 : 2 equals to 0.032. If the significance level is bigger than 0.05, the alternative hypothesis (Ha) is rejected and null hypothesis (H0) is accepted. And if the significance level is smaller than 0.05, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. Because the significance level of the result 0.032 less than 0.05, it means that alternative hypothesis (Ha) which states that there is any significanct different for students' writing achievement on recount text between the students who are taught by using Google Docs and those who are taught by using group investigation is accepted.

C. DISCUSSION

The objective of the research was to find out the significant difference for students' writing achievement on recount text between the students who are taught by using Google Docs and those who are taught by using group investigation.

In this research, the researcher conducted several steps to reach the objective of the research such as conducting pre-test, giving treatment, and conducting post test in the last meeting (fourth meeting). The researcher got the data from pre-test before conducting treatment and post test after conducting treatment. Then, the data was calculated by using Mann Whitney U test on SPSS 16.0 version for windows because the data was not normally distributed. The output of paired sample statistic showed that the mean score of pre test in experimental class was 71.5385 and the mean score of post test was 76.3462. It can be indicated that students' writing achievement had been improved after getting the treatment. On the output of Mann Whitney U test shown that z-value was -1.856 with p-value 0.064 (2-tailed). Because in this research used one right-tailed test, so the p-value has to divided into two. Thus, 0.064 : 2 equals to 0.034. If the significance level is bigger than 0.05, the alternative hypothesis (Ha) is rejected and null hypothesis (H0) is accepted. And if the significance level is smaller than 0.05, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. Because the significance level of the result 0.034 less than 0.05, it means that alternative hypothesis (Ha) which states that there is any significanct different for students' writing achievement on recount text between the students who

are taught by using Google Docs and those who are taught by using group investigat. It be concluded there was any significance different for students' writing achievement on recount text between the students who are taught by using Google Docs and those who are taught by using group investigation.

Based on the result of data analysis, it was found that using Google Docs collaborative writing activity is effective to teach writing recount text. The previous researcher also had proved that Google Docs Collaborative writing can be effective. For the first reseacher had been conducted by Deadora Rahma Mutia (2018) entitled "Improving Students' Narrative Writing Through Google Docs Collaborative Writing Activity", in this research, Google Docs in collaborative writing only used in Narrative text. Another previous study, related study conducted by Nilam Maolan Nisa (2019) with the title "Efektivitas Strategi Collaborative Writing Berbantuan Google Docs terhadap Peningkatan Kemampuan Menulis Siswa". This research uses quantitative research. The aim of this research was focused on the students' engagement in collaborative writing by using Google Docs.

Besides that, during research the researcher could also find out some advantages of using Google Docs on collaborative writing activity for the students. By using Google Docs, learning process more effective and the students were interested to follow learning activity. So, it could increase students motivation in learning. So, the score of the students in writing achievement after being taught by using Google Docs was increase. This finding was appropriate with the theory from Sanaky (2009), by using

learning media, the learning process will be more interesting, so it can lead to motivate student learning.

Besides the score of students' writing achievement was increase, the students writing problem can be solved. During the research, the students did collaborative writing activity on Google Docs. So, the students could help each other to solve writing problem in a group such as content, organization, vocabulary, language use, mechanic, etc. This finding was appropriate with the theory from Sanaky (2009), by using learning media, the learning process becomes more varied. The material is not only delivered orally, so students do not get bored quicly and more effectively and efficiently.

Based on explanation above that the use of Google Docs in Collaborative writing activity was effective in students' writing achievement. It has been verified by result of data analysis in that there is significance difference for students' writing achievement on recount text between the students who are taught by using Google Docs on collaborative writing activity and those who are taught by using group investigation. It can be concluded that the used of Google Docs on collaborative writing activity in teaching writing recount text in the second grade students at SMPN 1 Suruh Trenggalek is effective.