

CHAPTER IV

FINDINGS AND DISCUSSION

A. Finding

In this chapter, the researcher presented the data description of XI science grade of Raudhatussysyubban about using freewriting in teaching writing. The purpose are to find out the effectiveness of using freewriting. The instrument that is used by the researcher to get the data is test. The researcher collected the data and then described about the research result of XI grade Raudhatussysyubban. The researcher has consulted with the teacher who taught at XI grade Mr. Hendra to know the materials. Then, the researcher can make questions from material which is given by the teacher of XI grade Mr. Hendra.

1. Validity Test

The researcher did the research from July 13 2019, until August, 31 2019. Before doing this research in experiment class and control class, the researcher analyzed the instrumen whether it is valid or not before using the instrument to experiment class and control class by using SPSS v22 program.

2. Result of Pretest for Experiment and Control Groups

The pretest for experimental group was conducted on 13 May ,2019 at 9.30 – 10.30 a.m. and control group same day on 13 May , 2019 at 11.00 - 12.00 a.m. based on their schedules. All 29 students of experimental group and 34 students of control group in the attendance list took the test.

Table 4.1. Pretest score summary

	Experimental group	Control group
Number of students	29	34
Highest score	90	80
Frequency of the highest scores	2	12
Lowest scores	50	47
Frequency of the lowest scores	3	1
Mean score	69,52	70,94
Standard deviation	11,294	11,146

Table shows that the highest score for the experimental groups reaches 90, while the lowest score is 50. The frequencies for the highest score are two and the lowest score are three. It means that in the experimental group there is two students who got 90 and three students got 50. The mean score is 69,52 with 11,294 for standard deviation. Meanwhile, the highest score in the control group is 80 and the lowest score is 47. The frequency for the highest score is twelve, while the frequency for the lowest score is one. The mean score is 70.94 with standard deviation 11.146. The mean difference between the experiment and control group is 1,42 points.

The Descriptive Statistics of pretest result of the Experimental group

The data obtained from pretest of the experimental group was organized in the table of distribution frequency as shown in the Appendix .. . The aim was to find out the indexes in statistics : mean, median, mode, standard of deviation, variance, range, minimum, and maximum.

Table 4.2. The result of the computation for Statistical Index of Experimental Group.

Statistics

Score

N	Valid	
		29
Mean		69,52
Median		70,00
Mode		70
Std. Deviation		11,294
Variance		127,544
Range		40
Minimum		50
Maximum		90

The table showed the result of the computation for statistical index by using SPSS v22. Based on the calculation of measure central tendency, the mean was 69,52. The median was 70,00, and the mode was 70. Further, the value of standard deviation was 11,294 and the value of variance was 127,544. It can be inferred that the average of these differences would give some measure of how closely the data values cluster around the mean. Futher, figure showed the distribution frequency of the pretest score of experimental group.

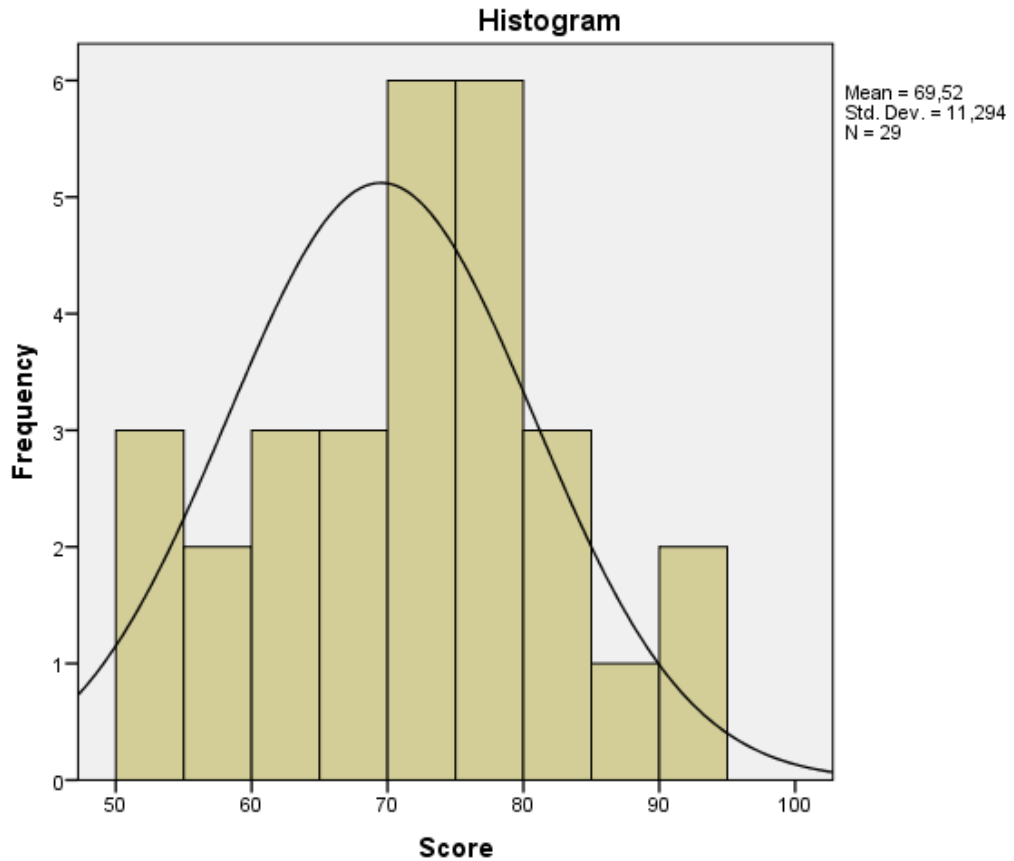


Figure 4.1. the distribution frequency of the pre test score of the experimental group.

The Descriptive Statistics of the Pre test Result of the Control Group

The data obtained from pre test of the control group also was organized in the table of distribution frequency as shown in the appendix. The aim was to find out the indexes in statistics: mean, median, mode, standard of deviation, variance, range, minimum, and maximum.

Table 4.3. The result of the computation for statistical Index of Control Group.

Statistics

Score

N	Valid	34
Mean		70,94
Median		75,00
Mode		80
Std. Deviation		11,146
Variance		124,239
Range		33
Minimum		47
Maximum		80

Table showed the result of the computation for statistical index by using SPSS v22. Based on the calculation of measure central tendency, the mean was 70.94, the median was 75.00, the mode was 80. Further, the value of standard deviation was 11,146 and the value of variance 124,239. It can be inferred that the average of these differences would give some measure of how closely the data values cluster around the mean. Further, Figure showed the distribution frequency of the pre test score of the control group.

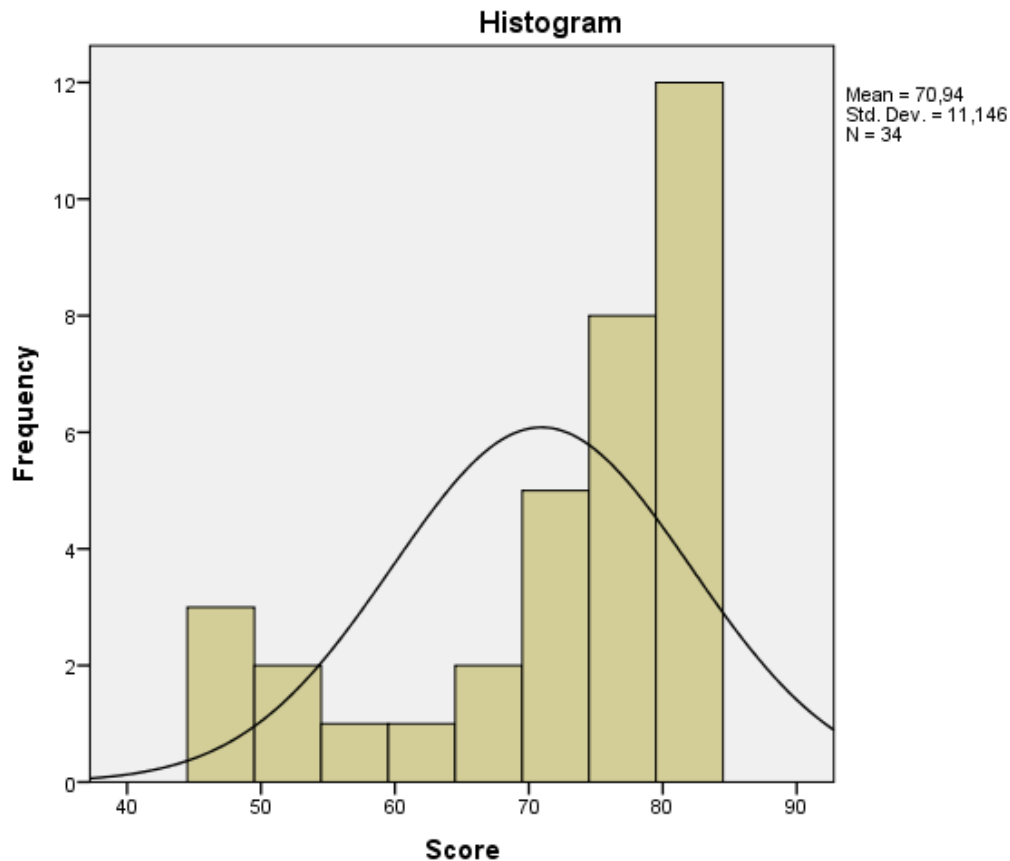


Figure 4.2 the Distribution Frequency of the pre test Score of the Control Group

Looking at the mean differences, the groups are not too different in their ability. However, a deeper analysis using statistical computation should be done. Thus, to check the experiment and control groups' equivalence before the experiment, a t-analysis was conducted using independent t-test. The result became the basis in choosing the appropriate inferential statistics for the posttest.

3. Result of Post test for Experimental and Control Groups

The Post test for experimental group was conducted on August 31, 2019 at 09.20 – 10.40 a.m. and control group was conducted on August 29, 2019 at 08.00 – 9.00 a.m. All 29 students of experimental and 34 students of control group in the attendance list follow the test. Table presents the post test scores summary (see

Appendix for more detail on the posttest scores for the experimental group and control group respectively).

Table 4.4. Posttest Score Summary

	Experimental group	Control group
Number of students	29	34
Highest score	100	98
Frequency of the highest scores	5	2
Lowest scores	60	55
Frequency of the lowest scores	2	2
Mean score	83,10	56,91
Standard deviation	13,089	38,823

Table shows that the highest score for the experimental group reaches 100, while the lowest score is 60. The frequencies for the highest score are five and the lowest score are two respectively. It means that the experimental group there are two students got 98 and two students got 55 (see appendix for more detail on all score frequencies). The mean score is 83,10 with 13,089 for standard deviation. Meanwhile, the highest score in the control group is 98 and the lowest score is 55. The frequency for the highest score is six, while the frequency for the lowest score is one. The mean score is 56,91. With standard deviation 38,823. The mean difference between the experimental and control groups is 26,19 point.

The Descriptive Statistics of the Post test Result of the Experimental Group

The data obtained from posttest of the experimental group was organized in the table of distribution frequency as shown in the Appendix. The aim was to find out the indexes in statistics: mean, median, mode, standard of deviation, variance, range, minimum, and maximum.

Table 4.5. The Result of the Computation for Statical Index of Experimental Group

Statistics		
Score		
N	Valid	29
	Missing	0
Mean		83,10
Median		83,00
Mode		100
Std. Deviation		13,089
Variance		171,310
Range		40
Minimum		60
Maximum		100

Table showed the result of the computation for statistical index by using SPSS v22. Based on the calculation of measure central tendency, the mean was 83,10, the median was 83,00, and the mode was 100. Further, the value of standard deviation was 13,089 and the value of variance 171,310. It can be inferred that average of these differences would give some measure of how closely the data values cluster around the mean, Futher, figure showed the distribution frequency of the posttest score of the experimental group.

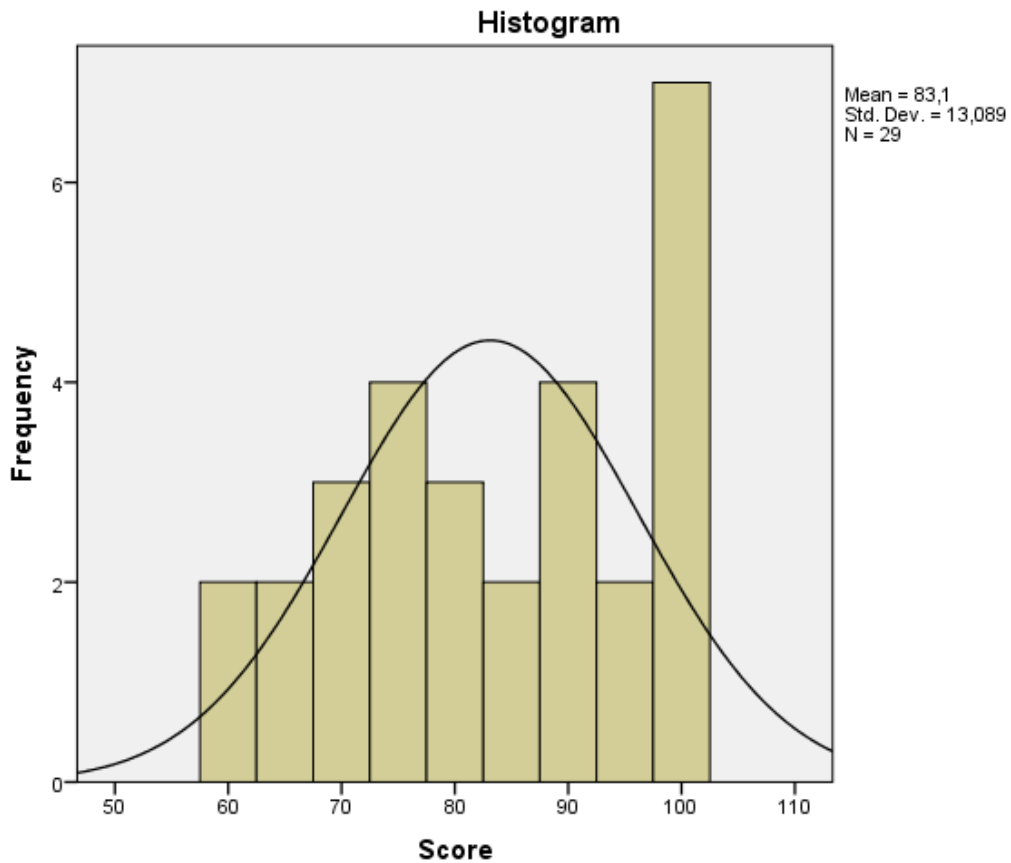


Figure 4.3 The distribution Frequency of the Post test Score of the Experimental Group.

The descriptive Statistics of the Post test result of the Control Group

The data obtained from posttest of the control group also was organized in the table of distribution frequency as shown in the appendix. The aim was to find out the indexes in statistics: mean, median, mode, standard deviation, variance, range, minimum, and maximum.

Table 4.4 the Result of the Computation for Statistical Index of Control Group

Statistics

control

N	Valid	34
	Missing	0
Mean		56,91
Median		75,00
Mode		0
Std. Deviation		38,823
Variance		1507,234
Range		98
Minimum		0
Maximum		98
Sum		1935

Table showed the result of the computation for statistical index by using SPSS v22. Based on the calculation of measure central tendency, the mean was 56,91, the median was 75,00, and the mode was 0. Further, the value of standard deviation was 38,823 and the value of variance 1507,234. It can be inferred that average of these differences would give some measure of how closely the data values cluster around the mean, Futher, figure showed the distribution frequency of the posttest score of the control group.

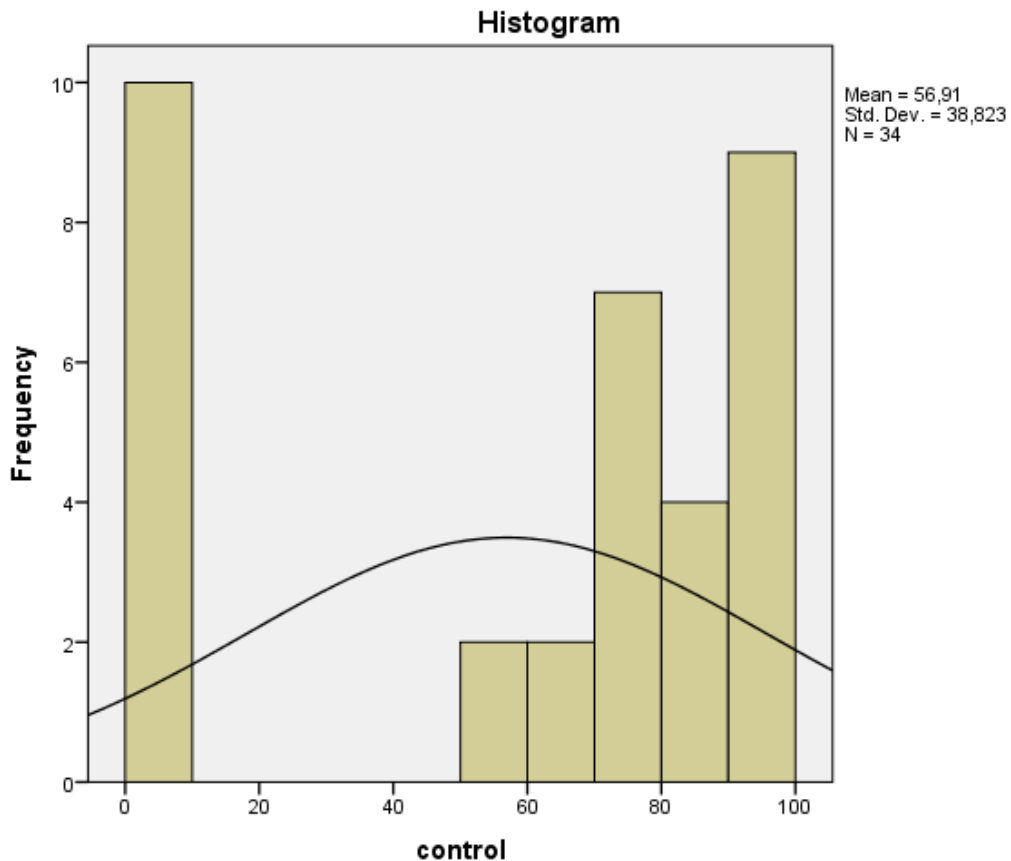


Figure 4.4 The distribution Frequency of the Post test Score of the Control Group.

The result of the posttest shows that the mean scores for both groups are increased. Compare to the pretest, the mean score gain for experimental group is 83,10, while for the control group 80,63. the difference is 2,47. Looking at a glance, Freewriting technique are more effective. However, this cannot be claimed before the statistical analysis is done. For futher analysis to answer the research problem, a statistical (final) analysis was conducted.

4. Normality Test and Statistik Test

(a).Test of Normality Pretest and Posttest Experiment Class

4.5. Table Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pretest	,138	29	,169	,960	29	,321
Posttest	,129	29	,200*	,926	29	,044

*. This is a lower bound of the true significance.

In this research, The researcher had sample less than 30. It means that the researcher using Shapiro-Wilk to be standard of normality test. The result of Experiment class was 0,321 with significant 0,05. It means value sig 0,321 > 0,05. The data is not normal if significant < 0,05 then, the data is normal if significant > 0,05. Based on the table the data is normal because significant 0,321 > 0,05.

Oneway

Test of Homogeneity of Variances

Table 4.6. prepost

Levene Statistic	df1	df2	Sig.
1,527	1	55	,222

ANOVA

Table 4.7.Prepost

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2854,315	2	1427,158	9,584	,000
Within Groups	8190,099	55	148,911		
Total	11044,414	57			

Based on the table homogeneity value sig 0,000 < 0,05 . It means the data is homogen. Based on the criteria test , known the distribution of data is normal, so statistic that the researcher use parametric namely paired T-test

T-Test

Table 4.8. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre	69,52	29	11,294	2,097
	Post	83,10	29	13,089	2,430

Table 4.9. Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre & Post	29	,277	,145

Table 4.10. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre – Post	-13,586	14,725	2,734	-19,187	-7,985	-4,969	28	,000

Based on the table Paired t-test known value sig.(2-tailed) is a 0,000 < 0,05, it means there is any differences in Experiment class for pretest and posttest.

(b).Test of Normality Pretest and Posttest Control Class

Table 4.11. Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Code	Statistic	Df	Sig.	Statistic	Df
Prepost	1	,230	34	,000	,772	34	,000
	2	,230	34	,000	,773	34	,000

a. Lilliefors Significance Correction

prepost

In this research, The researcher had sample more than 30. It means that the researcher using Kolmogorov-Smirnov to be standard of normality test. Based on the table value sig value sig 0,000 < 0,05, It means distribution of data is not normal.

Oneway

Test of Homogeneity of Variances

Table 4.12. Prepost

Levene Statistic	df1	df2	Sig.
55,325	1	66	,000

ANOVA

Table 4.13. Prepost

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3346,015	1	3346,015	4,102	,047
Within Groups	53838,618	66	815,737		
Total	57184,632	67			

Based on the table homogeneity value sig $0,047 < 0,05$. It means the data is homogen. Based on the criteria test , known the distribution of data is not normal, so statistic that the researcher use non-parametric namely Willcoxon.

NPar Tests

Wilcoxon Signed Ranks Test

Table 4.14. Ranks

	N	Mean Rank	Sum of Ranks
Post – Pre Negative Ranks	18 ^a	19,92	358,50
Positive Ranks	15 ^b	13,50	202,50
Ties	1 ^c		
Total	34		

a. Post < Pre

b. Post > Pre

c. Post = Pre

Table 4.15. Test Statistics^a

	Post – Pre
Z	-1,395 ^b
Asymp. Sig. (2-tailed)	,163

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Based on the table Wilcoxon value Asymp.Sig (2-tailed) 0,163 > 0,05 . It means there is not differences result learning Pretest between Experiment and Control Class.

(c). Uji Normalitas Pre Experiment dan Pre Control

Table 4.16. Tests of Normality

	Code	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Pre	1	,138	29	,169	,960	29	,321
	2	,230	34	,000	,772	34	,000

a. Lilliefors Significance Correction

In this research, The researcher had sample more than 30. It means that the researcher using Kolmogorov-Smirnov to be standard of normality test. Based on the table value sig value sig 0,169 > 0,05, It means distribution of data is normal .

Oneway

Table 4.17. Test of Homogeneity of Variances

pre

Levene Statistic	df1	df2	Sig.
,010	1	61	,921

Table 4.18. ANOVA

pre

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	31,733	1	31,733	,252	,617
Within Groups	7671,124	61	125,756		
Total	7702,857	62			

Based on the table homogeneity value sig $0,617 > 0,05$. It means the data is not homogen. Based on the criteria test , known the distribution of data is not normal, so statistic that the researcher use Non-parametric namely Mann-whitney test.

NPar Tests

Mann-Whitney Test

Table 4.19. Ranks

	Code	N	Mean Rank	Sum of Ranks
Pre	1	29	29,64	859,50
	2	34	34,01	1156,50
	Total	63		

Table 4.20. Test Statistics^a

	Pre
Mann-Whitney U	424,500
Wilcoxon W	859,500
Z	-,955
Asymp. Sig. (2-tailed)	,339

a. Grouping Variable: Code

Based on the table Mann Whitney U known Asymp.Sig (2-tailed) $0,339 > 0,05$. It means there is not differences result learning Pretest between Experiment class and Control Class.

(d). Post Test Experiment and Control Groups

Table 4.21. Tests of Normality

	Code	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Posttest	1	,129	29	,200*	,926	29	,044
	2	,141	24	,200*	,934	24	,122

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The researcher had sample more than 30. It means that the researcher using Kolmogorov-Smirnov to be standard of normality test. Based on the table value sig value sig $0,200 > 0,05$, It means distribution of data is normal .

Table 4.22. Test of Homogeneity of Variances

Posttest

Levene Statistic	df1	df2	Sig.
39,444	1	61	,000

Table 4.23. ANOVA

Posttest

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	10736,512	1	10736,512	12,009	,001
Within Groups	54535,425	61	894,023		
Total	65271,937	62			

Based on the table homogeneity value sig $0,001 < 0,05$. It means the data is homogen. Based on the criteria test , known the distribution of data is not normal and homogen, so statistic that the researcher use parametric namely Independent sample T-test.

T-Test

Table 4.24. Group Statistics

	Code	N	Mean	Std. Deviation	Std. Error Mean
Posttest	1	29	83,10	13,089	2,430
	2	34	56,91	38,823	6,658

Table 4.25. Independent Samples 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	
Posttest Equal variances assumed	39,444	,000	3,465	61	,001	26,192	7,558	11,079	41,305	
Equal variances not assumed			3,695	41,512	,001	26,192	7,088	11,883	40,501	

Based on the table value $t_{3,465} > t_{table} 1,670$, and then we can see value sig (2-tailed) $0,000 < 0,05$. It means there is any differences result value learning Posttest between Experiment class and Control Class.

(e). \bar{X} Value Experiment and Control groups

Table 4.26. Tests of Normality

	Code	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
rata2	1	,223	29	,001	,917	29	,026
	2	,186	34	,004	,898	34	,004

a. Lilliefors Significance Correction

The researcher had sample more than 30. It means that the researcher using Kolmogorov-Smirnov to be standard of normality test. Based on the table value sig value sig $0,001 < 0,05$, It means distribution of data is not normal.

Table 4.27. Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
3,329	1	61	,073

Table 4.28. ANOVA

rata2

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2276,629	1	2276,629	6,111	,016
Within Groups	22724,174	61	372,527		
Total	25000,804	62			

Based on the table homogeneity value sig $0,016 < 0,05$. It means the data is homogen. Based on the criteria test , known the distribution of data is not normal, so statistic that the researcher use non-parametric namely Mann Whitney U.

NPar Tests

Mann-Whitney Test

Table 4.29. Ranks

	Code	N	Mean Rank	Sum of Ranks
Rata2	1	29	38,16	1106,50
	2	34	26,75	909,50
	Total	63		

Table 4.30. Test Statistics^a

	Rata2
Mann-Whitney U	314,500
Wilcoxon W	909,500
Z	-2,462
Asymp. Sig. (2-tailed)	,014

a. Grouping Variable: Code

Based on the table Mann Whitney U known Asymp.Sig (2-tailed) $0,014 < 0,05$. It means there is any differences result value learning \bar{X} between Experiment class and Control Class.

B. Discussion

From observation, the researcher got the results in experiment and control classes. For experiment class, it was given treatment use Freewriting meanwhile for

control use Questioning technique. It can be concluded that the experiment class was more effective than control class.

Before conducting the test by the instrument, the researcher should get validity. The researcher always consult with English teacher about the test and lesson plan. Therefore the data is valid because some review from the English teacher. For example in experiment class the researcher must have the topic in the test because the teacher worry if the students can not understand and do not have any idea when they writing.

After getting the validity, the next was normality, based on the table 4.15, it showed the data of pretest Experiment and pretest Control which was normal in distribution. The researcher use Kolmogorov Smirnov to be standart of normality because the sample more than 30. If the p-value is less than say the conventional level 0,05, then one rejects the normality hypothesis, otherwise one doesn't reject it. Based on the table 4.17 it showed the data of pretest of experiment class and control class was homogen. Because of normality data is normal and homogeneity test is homogen so, the researcher use paramertic namely Man Whitney U. The table 4.19 showed there is not any differences result learning Pretest between Experiment and Control Class. This is the prove this research from the same level knowledge about english learning.

The table 4.4 showed the result of pre-test and posttest of experiment class the researcher use Shapiro Wilk to be standart of normality test because the sample less than 30. Data is normal if value sig < 0,05 , meanwhile data is not normal if value sig > 0,05. Based on the table 4.6 it showed the data of pre-test and posttest of experiment class was Homegent and distribution of data is normal, so the researcher use parametric namely paired T-test for compare there is any differences value learning in pretest and

posttest in experiment class after that given treatment until 4 meetings. Table 4.9 showed there is any differences result value learning students before and after treatment.

The data prove there is any differences in Experiment class for pretest and posttest. The experiment class was given freewriting in teaching writing. Thus freewriting can increase student's skill in teaching writing than without freewriting. Elbow States (1990: 13) that free writing activity can help students learn simply without worries about what they want to write. That is why students have more ideas to write what they want to say or feeling.

Meanwhile for control class, based on the table 4.10 for Pretest and Posttest Control group the researcher use Kalmogorov Smirnov to be standart of normality test because the sample more than 30. Data is normal if value sig < 0,05 , meanwhile data is not normal if value sig > 0,05. Based on the table 4.12 it showed the data of pre-test and posttest of control class was Homegent and distribution of data is not normal, so the researcher use nonparametric namely Willcoxon test for compare there is any differences value learning in pretest and posttest in control class after that given treatment until 4 meetings. Table 4.14 showed there is no differences result value learning students before and after treatment.

There is some reasons why that is happening, for the first pretest the students collect all their assigment but in the treatment 1, 2 and 3 some students have absent and not present in the process teaching-learning or treatment because some students exercise preparation for August 17. Other reason for treatment 4 and posttest some students in control groups also have problem for example not collect their assignment, and some students exercise for volly ball competition. It make influence for their

value(see the appendix for result of learning). That is why Pretest and Posttest in control group is not different.

On the other hand the researcher also calculate value posttest between experiment and control class. Look at the table 4.20 the researcher use kolmogorov smirnov to be standart of normality test. It showed the data is normal and we can see the table 4.22 it was Homegent and distribution of data is normal, so the researcher use parametric namely Independent sample T-test for compare there is any differences value learning in pretest and posttest in control class after that given treatment until 4 meetings. Table 4.24 showed there is any differences result value learning students in Experiment class and control class.

Moreover the researcher also calculate all of the value students. Based on the table .4.25 the researcher try to compare \bar{X} value learning from pretest , treatment one until four and posttest. The researcher use Kalmogorov Smirnov to be standart of normality test because the sample more than 30. Data is normal if value sig < 0,05 , meanwhile data is not normal if value sig > 0,05.

Based on the table 4.27 it showed the data of \bar{X} value experiment and control class was Homegent and distribution of data is not normal, so the researcher use Nonparametric namely Mann Whitney U for compare there is any differences \bar{X} value learning in experiment and control class after the researcher calculate result value from pretest, treatment and posttest. Table 4.29 showed there is any differences result \bar{X} value learning students in experiment class and control class.

In general, score of pre test in experiment and control class have same ability(see Appendix for value). Experiment class the average 69,57 and control class

70,94 the data is real because all of the students collect their assignment, so the researcher have complete value from pretest experiment and control class.

Contrast in posttest, experiment class was better than post-test in control class. It can be seen from the average(See appendix for value) and statistic data. Experiment class have average 83,10. Unlike in control class of the score of average is 56,91. However in control group there is x factor that make the control class really low score from treatment 3 until posttest. Some students not collect their assignment. It make their value is really low , the researcher just write 0 score for students not collect their assignment or not present in teaching learning.

So the alternative Hypothesis (ha) that stated there is a significant different achievement between the students who learn writing by using freewriting (experiment class) than the students who learn writing by using other technique was accepted. In the other word, Freewriting technique was effective in writing activity at eleven grade of MA Raudhatussysubban in academic year 2019/2020.

According to Chesla (2006: 32) states that free writing is maybe the famous prewriting technique. When students have some idea about the topic but students can not put word in a writing, freewriting can works because freewriting have function to develop idea into a good writing. It works when the researcher give treatment in experiment class, but sometime students have problem to get their ideas.

As a whole, the result of this research indicated that freewriting used by the researcher was effective. It is suitable theory from Peter Elbow (1980 :14) said that freewriting has many benefit for the first freewriting is not just writing something or write word on paper, but freewriting make a students thinking. Moreover freewriting also helping students to make writing easy.

There was a difference between experiment class and control class before using freewriting. Then, after experiment class is used freewriting in teaching the value was increasing and higher than control class using questioning technique. This research was supported the conclusion reached by several researchers in earlier studies Rohim (2018) ,Khairani (2015) and Rahmawati (2011).