CHAPTER IV

RESEARCH FINDING AND DISCUSSION

In this chapter, the researcher presents the finding and the discussion of the research. Four main topics will be discussed in this part the description of data, normality testing, hypothesis testing and discussion.

A. The Description of Data

In this sub chapter, the researcher presents the descriptive statistics of the research. The result of students' writing recount text achievement in term of pre-test and post-test, those were scored by using writing scoring rubric that attached in the appendix. The test requires the students to make a paragraph of recount text about students' experience in their first visiting to the boarding school. The tests were given to X-A of MA Terpadu Al Anwar Durenan. The numbers of students were 30 that consist of 7 males and 23 females. In addition, the test was conducted before and after using Peer correction Technique as the treatment in teaching writing recount text.

1. Computation Result of The Students' Score Before being Taught by Using Peer Correction Technique (Pre-Test)

The researcher administered a pre test in the form of writing for experimental class. It was conducted to know students' achievement in writing recount text test before getting a treatment. After getting students' score of pre-experimental class the researcher organize the result of the histogram chart of pre-test, the description statistics of pre-

test, and the frequency distribution scores based on processing in SPSS

20.0 version of software.

Table 4.1 Students' Score of Pre-Test

No.	Students' Name	Content	Organiz-ation	Vocabul-ary	Language Use	Mechan-ics	Pre-Test (Y1)
1	S1	26	18	14	16	3	77
2	S2	26	15	16	16	2	75
3	S3	25	14	13	17	3	72
4	S4	24	17	16	20	4	81
5	S5	22	13	14	16	3	68
6	S6	22	16	13	15	3	69
7	S7	17	10	10	11	3	51
8	S8	24	17	16	17	4	78
9	S9	19	14	13	15	2	63
10	S10	19	13	14	15	2	63
11	S11	20	14	13	15	3	65
12	S12	19	13	15	16	3	66
13	S13	21	13	13	17	3	67
14	S14	23	12	12	13	2	62
15	S15	20	14	11	13	2	60
16	S16	21	14	12	15	3	65
17	S17	21	15	14	16	3	69
18	S18	15	10	12	9	2	48
19	S19	21	14	16	17	3	71

20	S20	18	11	12	16	2	59
21	S21	20	14	15	15	2	66
22	S22	24	16	14	19	3	76
23	S23	23	15	16	20	3	77
24	S24	20	15	14	17	2	68
25	S25	16	11	12	13	2	54
26	S26	24	16	14	19	3	76
27	S27	20	15	13	14	2	64
28	S28	19	14	16	15	3	67
29	S29	20	15	16	17	3	71
30	S30	21	15	15	15	2	68
N=30/Total Score							2016

Based on the table above (table 4.1), it can be illustrated that the pre-test scores of 30 students had a total of 2016, which is the scores were taken from the 5 criteria by jacobs *et al.'s* version of the writing assessment. Each student had a different number of scores and this value could be used as a measure of the student's ability to write recount text at the senior high school level in grade 10.

For further information, the researcher calculated the data on the students' pre-test scores using SPSS 20.0 version.

**Table 4.2 Descriptive Statistic of Pre-Test**

Statistics

PRETEST

N	Valid	30
	Missing	0
Mean		67,20
Std. Error of Mean		1,432
Median		67,50
Mode		68
Std. Deviation		7,845
Variance		61,545
Range		33
Minimum		48
Maximum		81
Sum		2016

In this research, the group was intended to X-A students of MA Terpadu Al – Anwar. Table 4.2 showed that the total of data was divided with number of data which determined as mean score from pre-test, it was 67.20. Then, the half number of data sample which determined as median score from pre-test 67.50. To know the most frequently appeared number, the data used mode score and the most appeared number was 68. The standard deviation of pre-test is 7.845. The range of pre-test is 33. In addition, the minimum score of pre-test is 48. The maximum score is 81. The sum of pre-test is 2016.

To know the number of score appeared in pre-test, the researcher used frequency distribution as follow:

Table 4.3 Frequency Distribution of Pre-Test

PRETEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	48	1	3,3	3,3	3,3
	51	1	3,3	3,3	6,7
	54	1	3,3	3,3	10,0
	59	1	3,3	3,3	13,3
	60	1	3,3	3,3	16,7
	62	1	3,3	3,3	20,0
	63	2	6,7	6,7	26,7
	64	1	3,3	3,3	30,0
	65	2	6,7	6,7	36,7
	66	2	6,7	6,7	43,3
	67	2	6,7	6,7	50,0
	68	3	10,0	10,0	60,0
	69	2	6,7	6,7	66,7
	71	2	6,7	6,7	73,3
	72	1	3,3	3,3	76,7
	75	1	3,3	3,3	80,0
	76	2	6,7	6,7	86,7
	77	2	6,7	6,7	93,3
	78	1	3,3	3,3	96,7
	81	1	3,3	3,3	100,0
	Total	30	100,0	100,0	

Table 4.4 The Histogram's Data of Pre-Test
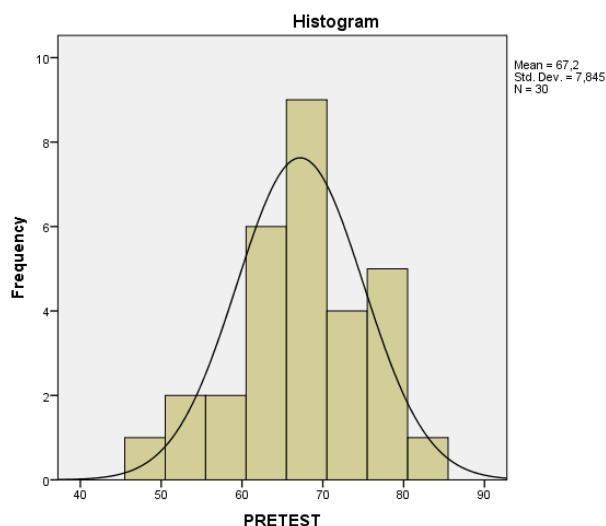
The table 4.3 and 4.4 showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

a. There are 5 students who got score between 41- 60, it means that the students writing achievement was still fair. It needed much enhancement.

b. There are 24 students who got score between 61- 80, it means that the students writing achievement was good enough. However, it also still needed enhancement.

c. There is only 1 student who got score between 81- 100, it means that the students writing achievement was excellent.

After knowing the result of pre-test, the researcher gave the treatment or Peer Correction technique with the purpose probably the students writing achievement could increase. At last, the researcher gave

post-test to measure the difference score or achievement after conducting the treatment.

2. **Computation Result of The Students' Score After being Taught by Using Peer Correction Technique (Post-Test)**

The researcher administered a post-test in the form of writing for experimental class. It was conducted to know students' achievement in writing recount text test after getting a treatment. After getting students' score of pre-experimental class the researcher organize the result of the histogram chart of pre-test, the description statistics of pre-test, and the frequency distribution scores based on processing in SPSS 20.0 version of software.

Table 4.5 Students' Score of Post-Test

No.	Students' Name	Content	Organiza-tion	Vocabu-lary	Language Use	Mechan-ics	Post-Test (Y2)
1	S1	27	18	18	20	4	87
2	S2	27	16	18	20	3	84
3	S3	26	21	18	19	4	88
4	S4	26	19	18	21	5	89
5	S5	26	18	17	19	4	84
6	S6	26	17	15	18	4	80
7	S7	21	15	14	13	4	67
8	S8	26	19	18	18	5	86

9	S9	21	15	16	19	4	75
10	S10	22	16	19	20	3	80
11	S11	25	19	17	16	4	81
12	S12	21	14	17	19	5	76
13	S13	26	16	13	18	4	80
14	S14	24	16	14	17	3	77
15	S15	24	17	15	17	3	74
16	S16	23	16	17	19	5	76
17	S17	17	10	13	11	3	80
18	S18	24	18	19	20	4	54
19	S19	21	13	13	18	3	85
20	S20	22	16	18	19	3	68
21	S21	24	16	19	21	4	78
22	S22	25	17	19	22	4	84
23	S23	23	19	16	19	3	87
24	S24	18	13	15	17	4	80
25	S25	27	18	17	21	4	67
26	S26	22	17	17	18	3	87
27	S27	21	16	18	16	4	77
28	S28	21	17	19	18	4	75
29	S29	22	17	18	19	4	79
30	S30	26	16	13	18	4	80
N=30/Total Score							2365

Based on the table above (table 4.5), it can be illustrated that the post-test scores of 30 students had a total of 2365, which scores were taken from the 5 criteria by jacobs *et al.'s* version of the writing assessment.

For further information, the researcher calculated the data on the students' post-test scores using SPSS 20.0 version.

Table 4.6 Descriptive Statistic of Post-Test

Statistics

POSTTEST

N	Valid	30
	Missing	0
Mean		78,83
Std. Error of Mean		1,381
Median		80,00
Mode		80
Std. Deviation		7,566
Variance		57,247
Range		35
Minimum		54
Maximum		89
Sum		2365

In this research, the group was intended to X-A students of MA Terpadu Al – Anwar. Table 4.6 showed that the total of data was divided with number of data which determined as mean score from post-test, it was 78.83. Then, the half number of data sample which determined as median score from post-test 80.00. To know the most frequently appeared number, the data used mode score and the most

appeared number was 80. The standard deviation of post-test is 7.566.
The range of post-test is 35. In addition, the minimum score of post-test
is 54. The maximum score is 89. The sum of post-test is 2356.

To know the number of score appeared in pre-test, the
researcher used frequency distribution as follow:

Table 4.7 Frequency Distribution of Post-Test

POSTTEST

		Frequency	Percent	Valid Percent	Cumulative Percent
	54	1	3,3	3,3	3,3
	67	2	6,7	6,7	10,0
	68	1	3,3	3,3	13,3
	74	1	3,3	3,3	16,7
	75	2	6,7	6,7	23,3
	76	2	6,7	6,7	30,0
	77	2	6,7	6,7	36,7
	78	1	3,3	3,3	40,0
Valid	79	1	3,3	3,3	43,3
	80	6	20,0	20,0	63,3
	81	1	3,3	3,3	66,7
	84	3	10,0	10,0	76,7
	85	1	3,3	3,3	80,0
	86	1	3,3	3,3	83,3
	87	3	10,0	10,0	93,3
	88	1	3,3	3,3	96,7
	89	1	3,3	3,3	100,0
	Total	30	100,0	100,0	

Table 4.8 Histogram Chart of Post-Test
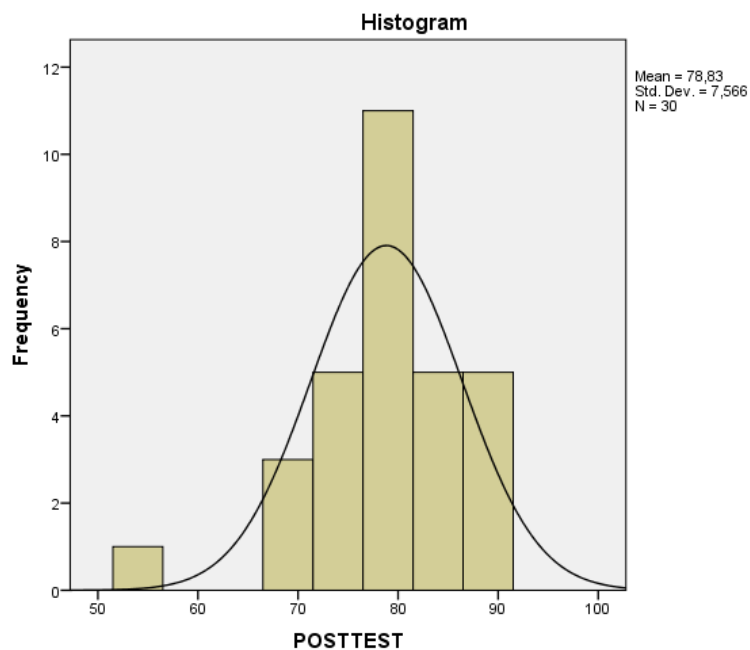
The table 4.8 and 4.9 showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

a. There is 1 student who got score between 41- 60, it means that the students writing achievement was still fair. It needed much enhancement.

b. There are 18 students who got score between 61- 80, it means that the students writing achievement was good enough. However, it also still needed enhancement.

c. There are 11 students who got score between 81- 100, it means that the students writing achievement was excellent.

B. The Data Analysis

1. Normality Testing

Normality testing is conducted to determine whether a data set is well modeled by a normal distribution or not. Normality test is intended to show that sample data from a normal distributed population to know the normality, the researcher used *One-sample Kolmogorov-Smirnov test* in IBM SPSS 20.0 by using the rule of Asymp. Sig (2-tailed) or p. If Asymp. Sig (2-tailed) or p more than 0.05, the test distribution is normal. The output of normality testing by SPSS 20.0 for Windows can be seen in the following table.

Table 4.9 Normality Testing

One-Sample Kolmogorov-Smirnov Test

		PRETEST	POSTTEST
N		30	30
Normal Parameters[a,b]	Mean	67,20	78,83
	Std. Deviation	7,845	7,566
Most Extreme Differences	Absolute	,096	,140
	Positive	,076	,090
	Negative	-,096	-,140
Kolmogorov-Smirnov Z		,527	,764
Asymp. Sig. (2-tailed)		,944	,603

a. Test distribution is Normal.

b. Calculated from data.

From the table, it can be known that the significant level of pretest is 0.944 and the significance level of posttest is 0.603. These values are higher than 0.05. So, the test distribution is normal.

2. Hypothesis Testing

This research is conducted to know whether there is significant different achievement of tenth grade students in MA Terpadu Al-Anwar in academic year 2019/2020 in writing recount text before and after being taught by Peer Correction technique. To analyze the finding data, the researcher uses Paired Sample Test by using SPSS 20.0 version.

When the sample size is large or at least 30, the z test is used. However, the z test is inappropriate when the sample size is less than 30. In relation with this, Bluman (1998: 378) states that t test is a statistical test for the population mean, and is used when the population is normally distributed or approximately normally distributed, σ is unknown, and n < 30.

The Hypothesis testing of this research as follows:

1. $H_0 = \mu_1 \leq \mu_2$ or the mean of post test is smaller than or equal to the mean of pre-test.

   The students' recount text writing ability after being taught using peer correction technique is less than or equal to their ability before being taught using peer correction technique.

2. $H_a = \mu_1 > \mu_2$ or the mean of post test is higher than or equal to the mean of pre-test.

   The students' recount text writing ability after being taught using peer correction technique is higher than or equal to their ability before being taught using peer correction technique.

To find out whether there is significant difference of students' writing recount text achievement before and after being taught by using peer correction technique, the researcher uses paired sample T-test at SPSS 20.0 for Windows. The test result is as follows:

Table 4.10 Paired Sample T-test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETEST	67,20	30	7,845	1,432
	POSTTEST	78,83	30	7,566	1,381

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRETEST & POSTTEST	30	,927	,000

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	PRETEST - POSTTEST	-11,633	2,965	,541	-12,741	-10,526	-21,489	29	,000

1. If P-value $\leq a$, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. It means that peer correction technique is effective for improving or raising students' writing recount text ability.

2. If P-value > *a*, the null hypothesis (H0) is accepted and the alternative hypothesis (Ha) is rejected. It means that peer correction technique is not effective for improving or raising students' writing recount text ability.

Based on the table 4.10 above, the output confirms that the students' mean of after and prior the treatment are respectively 67.20 and 78.83. The result of t-test reveals that the t value is -12.741, with the df 29, and *p-value* (0.000) is divided by two (0.000/2) equals to 0. Since 0 is smaller than the $\alpha = 0.05$, so the null hypothesis is rejected. In other word, the hypothesis saying that the mean after the treatment is bigger than the one before treatment. The conclusion is the use of peer correction technique is effective fro improving or raising the students' writing recount text ability.

C. Discussion

In this research, the researcher conducted the research in three steps. The first is giving pre-test to students. Pre-test is given to know the students' writing recount text score before being taught by using peer correction technique. The second steps is giving treatment or applying peer correction technique. The treatment is given twice. The third step is giving post test. The technique of taking a sample was random sampling to students of MA Terpadu Al-Anwar.

In this research, the standard deviation is to measure how much the variance of the sample. The standard deviation of pre-test is 7.845 smaller than the mean is 67.20 and the post-test is 7.566 smaller 78.83, if the standard deviation is bigger than the mean it means that the mean is not homogeny and

if the standard deviation is getting smaller than the mean it means that the mean is homogeny. Therefore, it can be concluded that standard deviation of pre-test and post test was homogeny, it means that the sample of this research almost has the same mean.

The standard error mean is to measure the accuracy with which a sample represents a population. The standard error mean of pre-test is 1.432 less than the mean of pre-test that is 67.20 and post test is 1.381 less than 78.83, if the standard error mean is getting higher than the mean it means that the sample is representative. Therefore, it can be concluded that the sample of this research indicated good sample or representative from population.

As the requirement of hypothesis, if the *p-value* is smaller than or equal to the α (0.05), it means that the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected. It can be said that students' writing recount text ability after being taught by using peer correction technique is higher than their skill before taught by using peer correction technique. In fact based on the table of paired sample t-test, the result shows that the number of the significant value is 0.000/2 equals to 0, and it is smaller than the $\alpha = 0.05$. It means that the use of peer correction technique is effective for improving or raising the students' writing recount text ability.

Finding result by using peer correction technique can increase students' achievement in writing recount text at senior high school especially at tenth grade of MA Terpadu AL-Anwar Durenan. Based on the mean of

pre-test 67.20 become 78.83 in post-test. The increasing score above related with the benefit of using peer correction technique generally on writing.

Regarding on the result of data analysis above, it's also strongly with previous study as stating that the use of Peer Correction Technique is effective for teaching Writing. Mahmoud J. Itmeizeh (2016), this study aims at investigating effectiveness of peer correction on students' progress in their written essays at PAUC. It also aims to investigate learners' attitudes towards peer correction technique. Twenty sophomore English major students aged 19-21 years, who are taking Writing II course with the researcher, were selected to be the participants of this study. To achieve the aims of the study, the researcher used three tools: a questionnair, a pretest-posttest and students' portfolios. The students had to correct and evaluate the essays, and respond to them during the lectures that each lasted for about 90 minutes. Results of the study showed that students have positive attitudes towards peer-correction and that most of the students were either interested or enjoyed this technique. Scores of the students in pre-test and posttest showed significant progress in students' abilities in writing essays as they found more mistakes by the end of the semester. Comparison between essay number one and essay number eight showed a plummeting percentage of mistakes. It is recommended that peer correction should be applied in a modest and proper way, with the teacher's careful monitoring.

Winanda Wahyuni (2018), this study was aimed to determine whether there was any significant effect on students' writing ability by using

Peer Correction technique than who was taught without using Peer Correction technique at class X of Islamic Senior High School 4 Agam. The population of this study was all of the students at class X of Islamic Senior High School 4 Agam that consist of 92 students who were divided into four classes. Then, the researcher took class X MIA 1 and X MIA 2 as the sample. Where class X MIA 1 as the experimental class that consist of 18 students and X MIA 2 as control class that consist of 19 students. Then, post-test was given after doing treatments for six meetings to know the effect of using Peer Correction technique to improve students' writing ability at class X of Islamic Senior High School 4 Agam. The result of this research showed that there was significant effect of Peer Correction technique that could be seen in the mean score of experimental class and control class, such as (77.39 and 71.21). Moreover, the score each component of writing both classes were *content* (23.78 and 22.89), *organization* (17.67 and 16.05), *vocabulary* (16.83 and 14.84), *language use* (15.56 and 14.42) and *mechanics* (3.22 and 2.73). Statistically, standard deviation of experimental class was (5.82), while in control class (6.74). Furthermore, t-calculate (3.159) was also higher than t-table (1.689). It can be concluded that Peer Correction technique improved the students' writing ability especially in considering five components of writing. So, this technique can be recommended to improve students' writing ability.

Rachmawati et al (2018), this research aimed to: 1) analyze quality of students" exposition text; 2) analyze their responses towards learning

writing exposition text using peer correction technique; and 3) find out challenges that they faced during the learning. Qualitative research method, especially document analysis design, was chosen. In this research, students" texts were analyzed to answer first research question and open-ended questionnaire was given to students to answer second and third research questions. To triangulate the findings from those instruments, peer debriefing and member checks methods were done. To analyze the data, qualitative data analysis by Miles et al (2014) was employed. The data analysis revealed that: 1) quality of students' exposition texts improved, especially in generic structure aspect; 2) students mostly grouped themselves with more competent peers, learned lesson material beforehand as preparation for correcting, used both English and Indonesian when correcting, concerned more about language feature of peers texts, employed their critical thinking in processing feedbacks, became a better writer in the end of semester, and still preferred teacher correction over peer correction technique; and 3) students biggest challenge was poor writing skill. From those findings, it can be concluded that: 1) peer correction technique seems to contribute to the quality of students' writing; 2) the students also respond positively towards the implementation of the technique; and 3) students' effort in improving their personal writing skill outside the classroom is required.

Sumekto (2019), this research aimed to measure the contributions of students' peer feedback set in the collaborative writing class. Of 144 population, 55 undergraduate English education students were involved as the

participants in a quasi-experimental research design which was conducted through a non-randomized five experimental and five control groups. There were 25 experimental participants attended in the regular classes with the collaborative writing class syntax, namely; genres selection, problem-based learning, genres, and peer feedback practices, while other 30 control participants naturally attended in the same activity. Data were collected through the collaborative writing's pre- and post-test, and peer feedback instruments within four weeks of the lectures. Data analysis used the Mann-Whitney U, and Wilcoxon signed rank tests. The findings show that the collaborative writing's peer feedback positively contributes to students' writing skills and learning awareness resulted in the post-tests. Peer feedback may correct students' writing mistakes and contribute a significant difference between the experimental and control groups (Z=-2,471; p≤0,05). Peer feedback socially tightens students' collaborative writing and promotes a mutual relationship among group members, and reduces lecturer's feedback.

Based on the all of the previous study above, there are a similarities and the differentiation. The differentiation is they use the technique for different writing skill than the researcher has. Meanwhile the researcher uses the technique for specific writing recount text. For the similarities is this technique is equally successful in improving students' writing skill.

Overall, it can be said that Peer Correction Technique in teaching writing is also suitable used in writing essay, recount text or just writing assignment. Furthermore, teaching writing recount text by using Peer

Correction Technique is effective to increase students' achievement in the level of first grade students of MA Terpadu Al-Anwar Durenan in academic year 2019/2020.