

CHAPTER IV

DISCUSSION AND FINDING

In this research, the researcher describes the data that has been obtained during the research . The finding and discussion of the data were used to answer the research questions that started in the first chapter.

A. Research Finding

The researcher did the research and got the complete data from all the research post test systematically and accurately. The data analyzed in order to draw a conclusion about objective of study. The purpose of the findings is to answer the research question in chapter one. The researcher described the findings is to answer the research question in chapter one. The researcher described the findings in this chapter into three part, those are described below:

1. Student's Score in Experimental Class

In this study , the researcher got a suggestion from the teacher to used 8E class as a Experimental group and 8C class as a control group.

In this experimental class, there were so many meetings because lack of the condition. The researcher made online class to collected the data because the school that took place was closed. Sometimes, the researcher opened a class at 8 am and few students who on-line even though we've approved the schedule before. It was being difficult time for the researcher explained the material to students. The teacher must

explained more one time. For example, in the pretest. the researcher need three meetings explained to the students. The time was out because for absent and waited some students were online. In the first meeting of pretest teacher was only introduced the students each other. In the second meeting of pretest the teacher explained about what the recount text was. Because the time was out. The learning was continued in the next meeting. In the third meeting of pretest, the teacher asked the students to made unforgettable moments related with recount text without clustering technique.

In the post test, there were two meetings because the lack of time too. Actually i have arranged the lesson plan. But because the undisciplined some students and the time was being wasted because waited for the students. Everything run didn't based on my prediction. In the first meeting of post test the teacher explained recount text with clustering technique. Then, in the second of post-test meetings the teacher asked the students made and submit their work.

The final score is obtained from the assignment of students writing recount text without a clustering technique or it can be called a pretest and the task of students writing a recount text with technique or commonly called post test. To summarize of the whole description that can be gotten from student's pre-test and post-test, the researcher made the following tables.

Bellow was table 4.1 . in this table , the researcher summarized the scores of student's pre-test and post test in the experimental class as well their gained scores.

Table 4.1: The Scores of Students' Test in Experimental Class

Students Number	Pre-test	Post-test	Gained Score
1	40	55	15
2	50	60	10
3	75	85	10
4	70	80	10
5	55	70	15
6	75	80	5
7	70	80	10
8	70	80	10
9	55	65	10
10	70	75	5
11	75	85	10
12	75	80	5
13	70	75	5
14	50	60	10
15	70	75	5
16	50	60	10
17	70	80	10
18	70	75	5
19	60	70	10
20	75	80	5
21	70	80	10
22	75	80	5
23	75	80	5
24	70	75	5
25	80	85	5
26	80	85	5
27	70	80	10
28	80	85	5
29	70	75	5
30	60	70	10

31	55	60	5
32	60	65	5
Total	2140	2390	250
Average	66,8	74,6	7,8

From the table below , it can be seen that the average of students pretest 8E as the experimental class is 66.8 attend the average score of their post test is 74,6. So the average from the students gained pre-test and post-test that is 7.8

For further detailed description, the writer added the following analysis to show the interval both of pretest and posttest in the experimental class and also the number of students which got a certain score in the same interval. This analysis will show the interval score which the most students got.

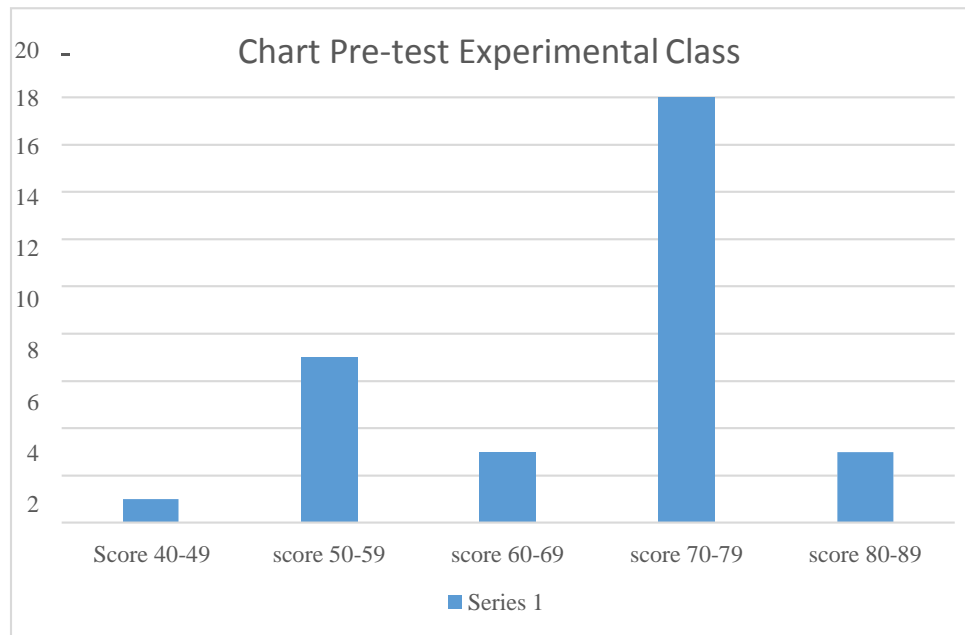
The following are the calculation of pre-test intervall score in experimental class and its frequency.

Table 4.2 Frequency Pretest of Experimental class

Score	Frequency
40-49	1
50-59	7
60-69	3
70-79	18
80-89	3
90-99	0
Total	32

Based on the table of pretest experimental class frequency score distribution, can be illustrated in the histogram in chart 4.1:

Chart 4.1 : Chart of Pre-Test' Experimental Class



Based on the table 4.2 and histogram 4.1 above, the results of calculation on the data before using clustering technique (pretest) frequency in the experimental class at the interval of score between 40-49 is 1 student, score 50-59 are 7 students, score 60-69 are 3 students, score 70-79 are 18 students, score 80 – 89 are 3 students.

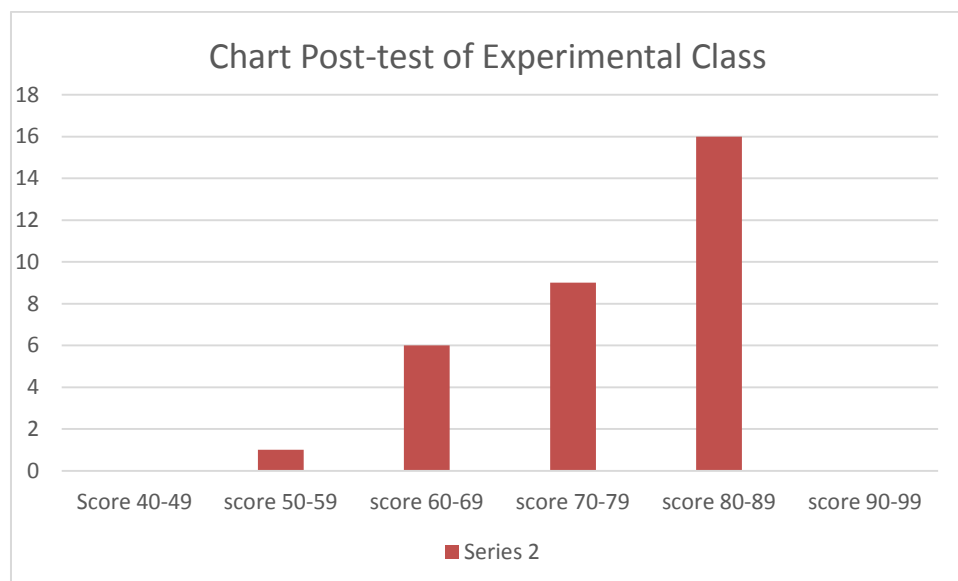
Table 4.3: Frequency Post test of Experimental Class

Score	Frequency
40-49	0
50-59	1

60-69	6
70-79	9
80-89	16
90-99	0
Total	32

Based on the table post test of experimental class frequency score distribution, can be illustrated in the histogram in chart 4.2 :

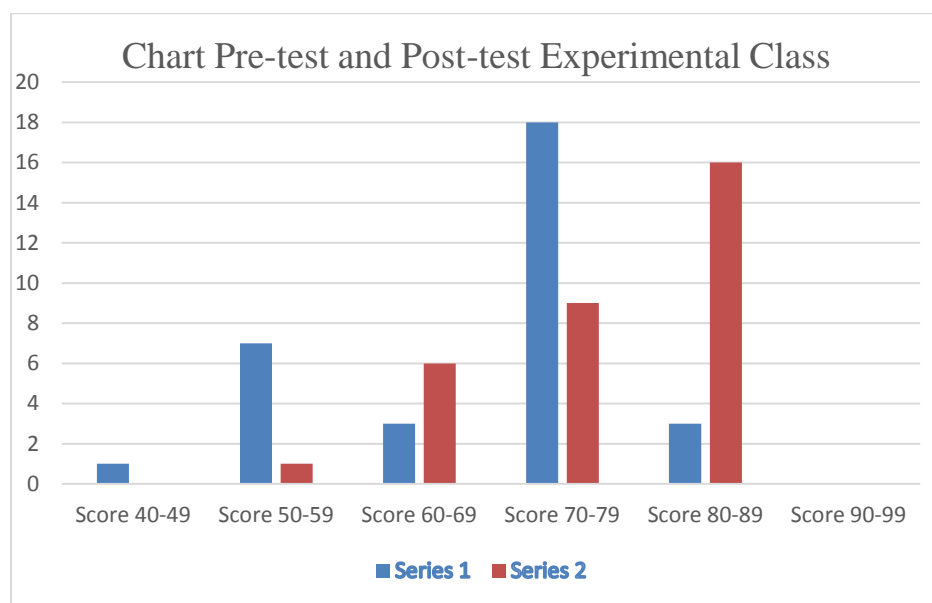
Chart 4.2 : Chart of Post-Test' Experimental Class



Based on the table 4.3 and histogram chart 4.2 above, the results of calculation on the data after using the clustering technique (Post-test) frequency in the experimental class at the interval of score between 40 - 49 is 0 student, score 50-59 is 1 student, score 60-69 are 6 students , score 70-79 are 9 students, score 80-89 are 6 students , and score 90-99 is 0 student.

Based on the table of pretest and posttest experimental class frequency score distribution, can be illustrated in the histogram in chart 4.3:

Chart 4.3 : Chart Of Post-Test' Experimental Class



Based on the table and histogram above , the results of calculation on the data before and after using the clustering technique (pretest and posttest) frequency in experimental class at the interval of score between 40-49 from 0 to 1 student, score 50-59 from 7 to 1 student, score 60-69 from 3 to 6 students, score 70-79 from 18 to 9, score 80-89 from 3 to 16 students, and score 90-99 is still 0 to 0 student.

2. Student's Score in Control Class

In control class , there were two meetings to got scores from students, the first day the teacher explained in advance what the recount

text was and then the students made a recount text example without the picture series technique, and at the second meeting, teacher continued the discussion about recount text using picture series techniques, and then the students perfected it to work on recount text with picture series in stages so that it was easy to understand.

The final score is obtained from the student's task of writing a recount text without a technique or it can be called a pretest and the task of second meeting students write a recount text using a technique or commonly called as a post test. To summarize of the whole description that can be gotten from student's post test, the researcher made the following tables. Below is a table 4.3. in this table , the researcher summarized the scores of students's post test in the control class as well their gained scores.

Table 4.4 : The Score of Students' Test in Control Class

Students' Name	Pre-Test	Post-Test	Gained Score
1	65	70	5
2	75	75	0
3	50	55	5
4	55	55	0
5	60	70	5
6	55	55	0
7	65	70	5
8	75	75	0
9	75	75	0
10	50	50	0
11	55	60	5
12	70	75	5

13	50	55	5
14	60	60	0
15	55	60	5
16	55	55	0
17	60	60	0
18	50	55	5
19	55	60	5
20	70	80	10
21	60	60	0
22	50	55	5
23	70	75	5
24	50	55	5
25	75	80	5
26	70	80	10
27	70	75	5
28	65	70	5
29	50	55	5
30	55	55	0
31	50	55	5
32	60	65	5
33	75	80	5
34	60	70	10
Total	2065	2200	130
Average	60	64	3,8

The above table showed that the average score's of student's post test and pre test in Control C class are 60 and 64 then the average of students' gained score between pre-test and post-test is 3.8.

For further detailed description, the writer added the following analysis to show both pre-test and post-test interval data in the control class as well as the frequent number of students which got a certain score in the same interval.

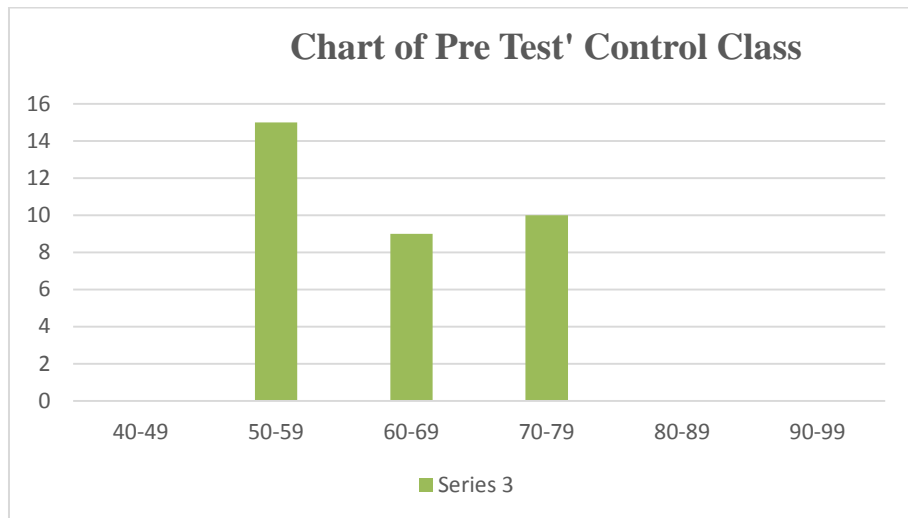
The following are the calculation of pretest and post test interval data in control class and its frequency :

Table 4.5
Table Frequency of Pretest Control Class

Score	Frequency
40-49	0
50-59	15
60-69	9
70-79	10
80-89	0
90-99	0
Total	34

Based on the table of pretest control class frequency score distribution , can be illustrated in the histogram in chart 4.4:

Chart 4.4 : Chart Of Pre-Test' Control Class



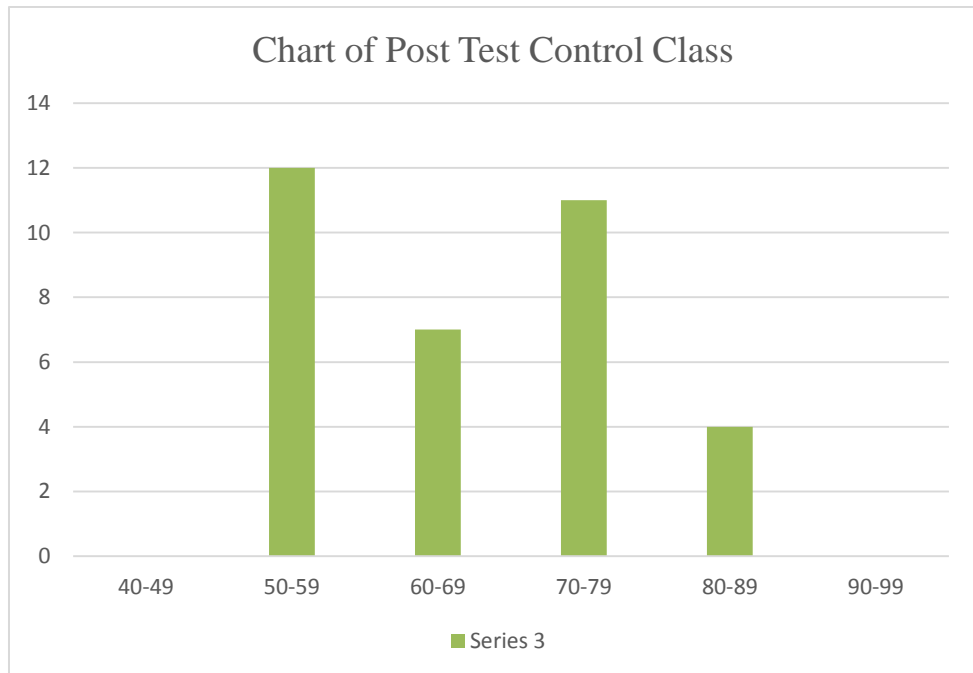
Based on the table 4.5 and histogram chart 4.4 above , the results off calculations on the data before using the picture series technique (pretest) frequency in the control class at the interval of score between 40-49 is 0, score 50-59 are 15, score 60-69 are 9, score 70-79 are 10, score 80-89 is 0, and score 90-99 is also 0.

Table 4.6 : Frequency of Post Test Control Class

Score	Frequency
40-49	0
50-59	12
60-69	7
70-79	11
80-89	4
90-99	0
Total	34

Based on the table of posttest control class frequency score distribution, can be illustrated in the histogram in chart 4.5:

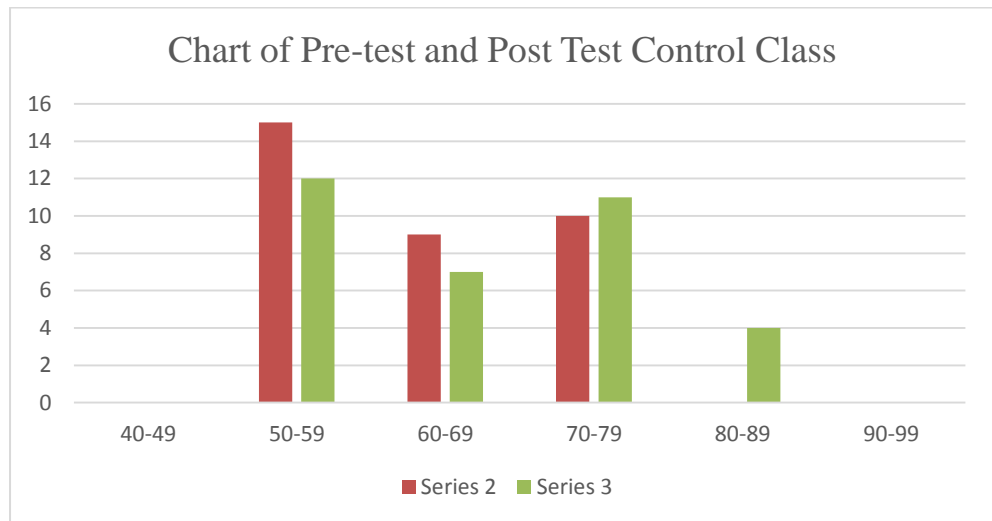
Chart 4.5 : Chart of Post Test Control Class



Based on the table 4.6 and histogram chart 4.5 above, the results of calculation on the data after using the picture series technique (posttest) frequency in the control class at the interval of score between 40-49 is 0, score of 50-59 are 12, score of 60-69 are 7, score of 70-79 are 11, score of 80-89 are 4, and score of 90-99 is 0 .

And based on the table between of pretest and posttest in control class frequency score distribution ,can be illustrated in the histogram in chart 4.6:

Chart 4.6 : Chart Of Pre-Test' Control Class



Based on the table and histogram above, the results of calculations on the data before and after using the picture series technique (pretest and posttest) frequency in the control class at the intervall of score between 40-49 is 0, score of 50-59 from 15 to 12, score of 60-69 from 9 to 7, score of 70-79 from 10 to 11 , score of 80-89 from 0 to 5 students and score of 90-99 is still 0.

Table 4.7 :
The result of calculation of the test both Experimental class (X) and control class (Y)

Students Number	X	Y	X	y	X^2	Y^2
1	15	5	7.2	1.2	51,84	1,44
2	10	0	2.8	-3.8	7,84	14,44
3	10	5	2.8	1.2	7,84	1,44
4	10	0	2.8	-3.8	7,84	14,44

5	15	5	7.2	1,2	51,84	1,44
6	5	0	-2,8	-3,8	7,84	14,44
7	10	5	2.8	1,2	7,84	1,44
8	10	0	2.8	-3,8	7,84	14,44
9	10	0	2.8	-3,8	7,84	14,44
10	5	0	-2,8	-3,8	7,84	14,44
11	10	5	2.8	1,2	7,84	1,44
12	5	5	-2,8	1,2	7,84	1,44
13	5	5	-2,8	1,2	7,84	1,44
14	10	0	2.8	-3,8	7,84	14,44
15	5	5	-2,8	1,2	7,84	1,44
16	10	0	2.8	-3,8	7,84	14,44
17	10	0	2.8	-3,8	7,84	14,44
18	5	5	-2,8	1,2	7,84	1,44
19	10	5	2.8	1,2	7,84	1,44
20	5	10	-2,8	6,2	7,84	38,44
21	10	0	2.8	-3,8	7,84	14,44
22	5	5	-2,8	1,2	7,84	1,44
23	5	5	-2,8	1,2	7,84	1,44
24	5	5	-2,8	1,2	7,84	1,44
25	5	5	-2,8	1,2	7,84	1,44
26	5	10	-2,8	6,2	7,84	38,44
27	10	5	2.8	1,2	7,84	1,44
28	5	5	-2,8	1,2	7,84	1,44
29	5	5	-2,8	1,2	7,84	1,44
30	10	0	2.8	-3,8	7,84	14,44
31	5	5	-2,8	1,2	7,84	1,44
32	5	5	-2,8	1,2	7,84	1,44
33		5		1,2		1,44
34		10		6,2		38,44
Total	265	130	-25,6	9.6	337.6	316
average (M)	8,28	3.82	-0.8	0.2	10.55	9.2

Note:

X: From gained score VIII-C (Control Class)

Y: From gained score VIII-E (Experimental Class)

□ : X-MX

ℳ : Y-MY

From the table above, it can be seen that the average of the students gained score in the experimental A class is higher than those students in the control class got average gained score 7.8 while those in the control class got 3.8 as their average gained score.

B. Normality Testing

The result of normality test on both experimental and control class' pretest and post-test was gained from *Liliefors* test using SPSS 16. The test is determined if the distribution of the data the sample is normal. If the normality is more than the level of significance α (0.05), score will be s Statistics>Explore. Fill variable on Dependent List And Fill Another on Factor Box. Click Plots> Checklist Normally Plots with Test>Continou>Ok. The following was the result of normality test of the experimental and control class's pretest:

Table 4.8
Normality pre-test result between experimental and control classes
Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
kelas	Control	.194	32	.004	.880	32	.002
	2	.308	32	.000	.872	32	.001

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
Control		Statistic	Df	Sig.	Statistic	Df	Sig.
kelas	Control	.194	32	.004	.880	32	.002
	2	.308	32	.000	.872	32	.001

a. Lilliefors Significance Correction

The result of the normality test above showed that the significance of the experimental and control class were 0.004 and 0.002. The control were 0.000 and 0.001. It means that the significance of both experimental and control class was lower than (<) the degree of significance 5% ($\alpha = 0.05$). Therefore it could be concluded that the data both of experimental and control class' pretest was'nt normally distributed.

The following was the results of normality test of experimental and control class' post test :

Table 4.9
Normality Post-test Results between Experimental and Control Class
Tests of Normality

VAR0 0003	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Kelas 1	.229	32	.000	.875	32	.002
2	.227	32	.000	.859	32	.001

a. Lilliefors Significance Correction

The results of the normality test above showed that the significance of the experiment were 0.00 and 0.01. The control class were 0.00 and 0.002. It means that the significance of both experimental and control class's posttest was't lower than ($<$) the degree of significance 5% ($\alpha=0.05$). In addition , it could be concluded that the data of experimental and control class' posttest wasn't normally distributed.

C. Homogeneity Testing

After doing the normality test, the researcher continued to use homogeneity testing. Homogeneity testing is used to test whether the data from the two groups have the same variant in order the hypotheses can be tested using t-test. In calculating homogeneity test , the researcher used *Levene* Statistic Test from SPSS 16. The steps are :Click Analyze > Compare Means > One Way Anova > Fill variable on Dependent List and Fill Another variable on Factor Box > Click Option > Checklist Homogeneity of Variance Test > Continou > Ok. The following tables contained the result of homogeneity from pre-test score between experimental and control class.

Table 4.10
Homogeneity Pretest Results between Experimental and Control Class

Test of Homogeneity of Variances

Pretest

Levene Statistic	df1	df2	Sig.
1.758	5	25	.158

Table 4.11

Homogeneity Pos-Test Results between Experimental and Control Class

Test of Homogeneity of Variances

Post-test

Levene Statistic	df1	df2	Sig.
1.271	4	25	.308

From the result of the Levene statistic above, it could be seen that the significance of the data from experimental and control' pre-test score was 0.158 and the post-test was 0.308. It means the significance of the data was higher than the significance degree ($\alpha = 0.05$). The result of homogeneity test showed that pre-test and post-test between experimental and control class had homogeneity distribution and can be tested using t-test.

D. Hypotesis testing

After describing the data which got from students pretest and post test, the writer then analysis the data and test the hypotesis by using statistical

calculation of t-test formula with the degree of significance 5%. The following the analysis:

1. Determine Mean 1 (M1)

$$\begin{aligned} M1 &= \sum \frac{\sum x}{N1} \\ &= \sum \frac{265}{32} \\ &= 8.28 \end{aligned}$$

2. Determine Mean 2 (M2)

$$\begin{aligned} M &= \sum \frac{\sum y}{N} \\ &= \sum \frac{130}{34} \\ &= 3,82 \end{aligned}$$

3. Determining Standard of Deviation Score of Variable X (SD_1)

$$\begin{aligned} SD_1 &= \sqrt{\sum \frac{x^2}{N1}} \\ SD_1 &= \sqrt{\sum \frac{337.6}{32}} \\ SD_1 &= 10,55 \end{aligned}$$

4. Determining Standard of Deviation Score of Variable Y (SD_2)

$$\begin{aligned} SD^2 &= \sqrt{\sum \frac{y^2}{N2}} \\ SD^2 &= 1 \sqrt{\sum \frac{316}{34}} \\ SD^2 &= 9,2 \end{aligned}$$

5. Determining Standard Error of Mean Variable X (SE_{M1})

$$\begin{aligned} SE_{M1} &= \frac{SD1}{\sqrt{N1-1}} \\ SE_{M1} &= \frac{10,55}{\sqrt{32-1}} \end{aligned}$$

$$= 1,91$$

6. Determining Standard Error of Mean Variable Y(SE_{M2})

$$SE_{M2} = \frac{SD2}{\sqrt{N2-1}}$$

$$SE_{M2} = \frac{9,2}{\sqrt{34-1}}$$

$$= 1,61$$

7. Determining Standard Error of Different of Mean of Variable X and Variable Y

$$SE_{M1-M2} = \sqrt{SEM_1^2 + SEM_2^2}$$

$$SE_{M1-M2} = \sqrt{1,91^2 + 1,61^2}$$

$$SE_{M1-M2} = \sqrt{3,61 + 2,56}$$

$$SE_{M1-M2} = \sqrt{6,17} = 2,4$$

8. Determining t_0 with Formula

$$t_0 = \frac{M1 - M2}{SEM1 - SEM2}$$

$$t_0 = \frac{8,2 - 3,8}{2,4}$$

$$t_0 = 1,8$$

9. Determining t-table in Significance 5% with Degree of freedom

$$df = (N1+N2-2)$$

$$df = (32+34-2)$$

$$df = 64$$

10. The comparison between t-score with t-table :

$$t\text{-score} = t_0 < t_t = 1,6 < 2,00$$

E. Discussion

The discussion in this study is presented based on the results of findings and also discusses the review of related theory and analyses the data to clarify the findings. The researcher focuses on the effectiveness of clustering technique on writing recount text ability at MTsN 2 Blitar.

1. Students Score of Experimental Class

Based on the finding on the table 4.1 students's score Experimental class shows the students' score experimental class, the average of the score from 66.8 to 74.6 . it can be concluded that students of MTsN 2 Blitar from 8E class as experimental class with clustering technique were quite good but still need many improve in writing recount text with clustering technique because they will become a roll models of the other students' class practice teaching in writing class

2. Students Score of Control Class

Based on finding in table 4.4 students' score in control class, it shown student's score pretest and post test, the average score from 60 to 64 . most of respondents got thbe writing recount text score lower than standards score from teacher.

3. Analysis the data

The data ws obtained in by conducting and observing the teaching and learning process in writing recount text by using clustering technique and picture series technique. The teacher conducted the teaching through online beacause this situation right now.

From the students' pretest and posttest', the researcher got a whole description about students writing skill in recount text before and after treatment. In addition, the researcher also got a dscription of students gained scores both in the experimental and control groups.

Further, as resulted on the above analysis, the t-observation score is 1,6 is lower than t-table score is 2.00. it ,means that the null hyphotesis is accepted and the alternative hypothesis is rejected . the followings are the null and alternative hypothesis of this study :

- a. Alternative hypothesis: teaching writing of recount text using clustering technique is effective to eighth grade at MTsN 2 Blitar.
- b. Null hypothesis: teaching writing of recount text using clustering technique is not effective to eight grade at MTsN 2 Blitar

Thus, this study is rejected hypothesis which the teaching writing of recount text using clustering technique is effective to the eighth grade students of MTsN 2 Blitar. Different from previous study, "*The Effectiveness Of Clustering Technique In Teaching Writing At Mts Raudlatul Ulum*" by Dwi Wahyu on 2012. Her research show that clustering technique is effective for teaching writing at MTs or junior high school.