

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter presents three topics related to research finding and discussion. Those are the description of data, hypothesis testing and discussion.

A. Description of Data

The research was conducted at SMA Antartika Sidoarjo with population were all of the tenth grade students of SMA Antartika Sidoarjo. There were 13 classes at the tenth grade. The total of tenth grade students were 512 students. The sample of this research was X S 3 which consisted of 38 students, 19 male and 19 female students as experimental group because the researcher was conducted pre-experimental research. This research used buzz group technique to teach students' writing recount text. This research was conducted on February 5th 2020 until February 19th 2020. The researcher used test to get the data, those were pre-test and post-test.

In this research, the researcher presented the data of students' writing score, pre-test and post-test. Then, the researcher wanted to know the effectiveness of using buzz group technique toward students' achievement in writing recount text of the tenth grade at SMA Antartika Sidoarjo. The effectiveness could be seen from significance different of students' score in writing recount text before and after being taught by using buzz group technique. Furthermore, the researcher conducted pre-

test, giving treatment about recount text using buzz group technique and post test. Before and after treatments, the researcher did pre-test and post-test. Afterward, the researcher got the students' score in writing recount text.

Table 4.1 the score's criteria

No	Criteria	Range of Score
1	Excellent	21-25
2	Average	11-20
3	Poor	5-10

The criteria divided into three criterion adapted by (Cohen, 1994:328-329). The score criteria were excellent, average, poor. The ones was students categorized into excellent score if they got 21-25 score which the students did the test very well. Furthermore, the students categorized into average score if they got 11-20 score which the students did the test pretty well. The last criterion were students categorized into poor score if they got 5-10 score which the students just did the test.

1. The Data of Pre Test

In this part of test, the researcher asked the students to write the story about "Imaginative Recount Text". The students were given about 20 minutes to discussed and write the recount text. There were 38 students as the sample of this research. The purpose of conducting pre-test was intended to measure the students' writing achievement before they were given the treatment. The result of pre-test (4.2), the descriptive statistic of

pre-test score consisted of mean (table 4.3), and the frequency distribution of pre-test (table 4.4), and the histogram chart of pre-test (4.5), those can be seen as below :

Table 4.2 students' score before being taught by using buzz group technique

No	Name	Score
1	A.B.S	10
2	A.P.F	12
3	A.A	16
4	A.B.K	13
5	A.D.P	12
6	A.R.P	11
7	A.N.R	16
8	B.R.F	13
9	B.R.D	10
10	D.B	12
11	D.D.R	16
12	D.A.H	10
13	D.N.K	12
14	F.M.H	11
15	F.S.W	10
16	F.C.N	16
17	H.S.D.P	12
18	I.A.M	11
19	J.D.W	10
20	J.R.V	16
21	K.M.U.A	10
22	L.N.F	13
23	L.S.N	11
24	M.S	10
25	M.R	11
26	M.A	16
27	M.O.I	10
28	M.A.K.S	15
29	M.F.R	10
30	M.C.Y	15
31	M.S.A.R	13
32	M.S.W	10
33	N.Y	15
34	P.R.G	12
35	P.N.F	13
36	R.S	15
37	R.A.M	13
38	R.A.B.E	15

The researcher used SPSS 16.0 version to know the descriptive statistic and the percentage of students' score of pre-test. The percentage was divided into three criterion : excellent, average, and poor. The result of calculation as follows :

Table 4.3 Descriptive statistic of pre-test

Statistics		PRE_TEST
N	Valid	38
	Missing	0
Mean		12.53
Median		12.00
Mode		10
Std. Deviation		2.215
Minimum		10
Maximum		16

a. Multiple modes exist. The smallest value is shown

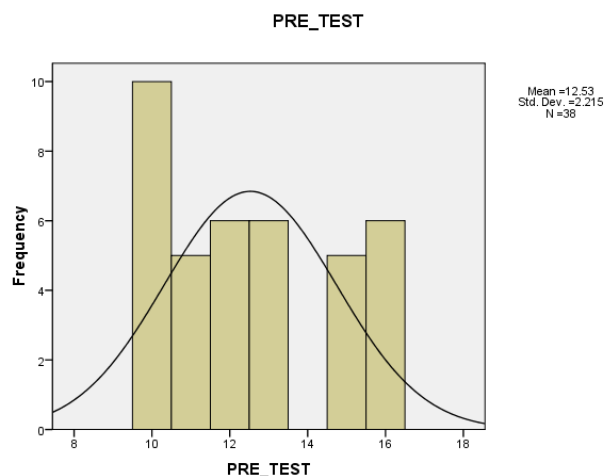
Based on the table 4.3 above, it showed the minimum score of pre-test was 10, the maximal score of pre-test was 16, standard deviation 2.215, and the mean was 12.53.

**Table 4.4 The frequency of students' score in writing recount text
before taught using buzz group technique**

		PRE_TEST			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	10	26.3	26.3	26.3
	11	5	13.2	13.2	39.5
	12	6	15.8	15.8	55.3
	13	6	15.8	15.8	71.1
	15	5	13.2	13.2	84.2
	16	6	15.8	15.8	100.0
	Total	38	100.0	100.0	

From the table 4.4 at the previous page, frequency of pre-test after being distribute there were 10 students got the score between 5-10 which meant that the students' score in writing recount text were poor. There were 28 students got the score between 11-20 which meant that the students' score in writing recount text were average. There is no student who got the score between 21-25 which meant that the students' score in writing recount text were excellent.

Figure 4.5 The Percentage of Score in Pre-Test



As can be seen from the Table 4.2 and further explained by Figure 4.5, 10 students (26%) got 5-10 score, 28 students (73%) got 11-20 score, and there is no student (0%) got 21-25 score. That was find the considering of students' score by using buzz group technique in composing of a recount text. The students seemed a bit difficult to improve their knowledge into a good and interesting text. Then, after accepting treatments to students showed the improvement. As can be seen from the Table 4.2 and further explained on Figure 4.5.

2. The data of Post Test

In this part of test, the researcher asked the students to write the story about "Factual Recount Text". The students were given about 20 minutes to discussed and write the recount text. There were 38 students as the sample of this research. The purpose of conducting post-test was intended to measure the students' writing achievement after they were

given the treatment. The result of post-test (4.6), the descriptive statistic of post-test score consisted of mean (table 4.7), the frequency distribution of post-test (table 4.8), the histogram chart of post-test (4.9) those can be seen as below :

Table 4.6 students' score after being taught by using buzz group technique

No	Name	Score
1	A.B.S	17
2	A.P.F	20
3	A.A	24
4	A.B.K	22
5	A.D.P	20
6	A.R.P	21
7	A.N.R	24
8	B.R.F	22
9	B.R.D	17
10	D.B	20
11	D.D.R	24
12	D.A.H	17
13	D.N.K	20
14	F.M.H	21
15	F.S.W	17
16	F.C.N	24
17	H.S.D.P	20
18	I.A.M	21
19	J.D.W	17
20	J.R.V	24
21	K.M.U.A	23
22	L.N.F	22
23	L.S.N	21
24	M.S	23
25	M.R	21
26	M.A	24
27	M.O.I	23
28	M.A.K.S	18
29	M.F.R	23
30	M.C.Y	18
31	M.S.A.R	22
32	M.S.W	23
33	N.Y	18
34	P.R.G	20
35	P.N.F	22

36	R.S	18
37	R.A.M	22
38	R.A.B.E	18

The researcher used SPSS 16.0 version to know the descriptive statistic and the percentage of students' score of post-test. The percentage was divided into three criterion : excellent, average, and poor (see the table 4.1 on the previous pages). The result of calculation as follows :

Table 4.7 Descriptive statistic of Post-test

		Statistics
		POST_TEST
N	Valid	38
	Missing	0
Mean		20.82
Median		21.00
Mode		20 ^a
Std. Deviation		2.381
Minimum		17
Maximum		24

a. Multiple modes exist. The smallest value is shown

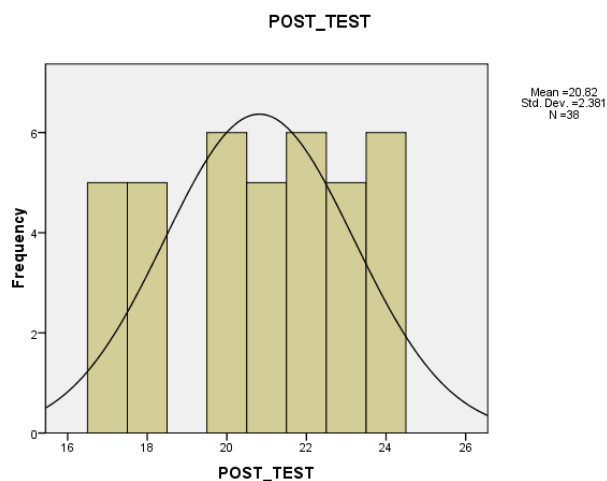
Based on the table 4.7 above, it showed that the minimum score of post-test was 17, the maximum score was 24, standard deviation 2.381, and the mean 20.82.

Table 4.8 the frequency of students' score in writing recount text after taught using buzz group technique

POST_TEST				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 17	5	13.2	13.2	13.2
18	5	13.2	13.2	26.3
20	6	15.8	15.8	42.1
21	5	13.2	13.2	55.3
22	6	15.8	15.8	71.1
23	5	13.2	13.2	84.2
24	6	15.8	15.8	100.0
Total	38	100.0	100.0	

From the table 4.8, the frequency of post-test after being distribute showed there were no student got 5-10 score in writing recount text were poor. There were 10 students got 11-20 which mean that students' score in writing recount text were average. There were 28 students got the score between 21-25 which mean that students' score in writing recount text were excellent.

Figure 4.9 The Percentage of Score in Post-Test



As can be seen from the Table 4.6 the data score and further explained by Figure 4.9, there is no student (0%) got 5-10 score, 10 students (26%) got 11-20 score, 28 students (74%) got 21-25 score.

B. Normality Testing

Normality testing is a statistical process used determine if a sample or any group of data it is a standard normal distribution or not. The purpose of normality testing is representing the data population was normal it and could be considered.

In this research to measure the normality testing, the researcher used SPSS 16.0 *One Sample Kolmoogorov-Smirnov* testing with the provision that if $Asymp. Sig > 0.05$, the data were normally distributed (Asmarani, 2008:234). Basic decisions making normality testing were follows :

- a. If the significance value > 0.05 , the data had normal distribution
- b. If the significance value < 0.05 , the data did not have normal distribution

The result of normality testing can be seen in table below :

Table 4.10 the result of normality testing

		PRE_TEST	POST_TEST
N		38	38
Normal Parameters ^a	Mean	12.53	20.82
	Std. Deviation	2.215	2.381
Most Extreme Differences	Absolute	.157	.145
	Positive	.149	.145
	Negative	-.157	-.138
Kolmogorov-Smirnov Z		.971	.892
Asymp. Sig. (2-tailed)		.303	.404

a. Test distribution is Normal.

From the table above, the significance of pre-test in Kolmogorov-Smirnov was 0.303 and it was higher than 0.05. The result of post test in Kolmogorov-Smirnov was 0.404 and it was higher than 0.05. It means that H_a is accepted and H_0 is rejected. So, it could be concluded that the data (pre-test and post-test) are normal distribution.

C. The Result of T-test

Data analysis was done to know the difference of students' score in writing achievement of X S 3 class in SMA Antartika Sidoarjo in academic year 2019/2020 in writing recount text before and after being taught by using buzz group technique. To analyze finding the data, the researcher used *Paired Sample T-test* by using SPSS 16.0. The researcher used T-test because the data distribution was normal. The result of can be seen in the table 4.11 below :

Table 4.11 Descriptive Statistic for Pre-test and Post-test Paired Samples Statistics

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE_TEST	12.46	37	2.206	.363
	POST_TEST	20.89	37	2.366	.389

From the table 4.11, there were 38 students as sample of this research. The name of the students had been mentioned by initial name to keep the privacy of the students. The researcher administered the test before being taught by using buzz group technique. The test consisted of instructions about the way to write a recount text in essay form. According to the table showed the descriptive statistic of pre-test and post-test. The previously mentioned that there are two hypothesis in this study, there are (1) H_0 stating that there is no any significant difference on students writing achievement of recount text before and after being taught by using buzz group technique ; (2) H_a stating that there is any significant difference on students writing achievement of recount text before and after being taught by using buzz group technique.

Table 4.12 Paired Sample Correlation

		Paired Samples Correlations		
		N	Correlation	Sig.
Pair 1	PRE_TEST & POST_TEST	37	.340	.040

The table above showed that there were any significant difference score between pre-test and post-test is 0.040. If the Sign. > 0.05 , it means that H_0 is accepted. If the Sign. < 0.05 , it means that H_0 is rejected. It showed that Sign. Is lower means that H_0 is rejected and H_a is accepted. So based on the table above, it can be conclude that using buzz group technique in teaching writing recount text was effective on students' writing achievement of recount text.

Table 4.13 The Result of paired sample t 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_TEST - POST_TEST	-8.289	2.740	.445	-9.190	-7.389	-18.648	37	.000

D. Hypothesis Testing

From the data analysis it could be identify that :

1. If Sign. $< \alpha$, the null hypothesis (H_0) is rejected and the alternative (H_a) is accepted. It means that there is significance different students' achievement of students' writing achivement in recount text at tenth grade in SMA Antartika Sidoarjo before and after being taught by using buzz group technique, it means that it is effective.

2. If $\text{Sign.} > \alpha$, the null hypothesis (H_0) is accepted and the alternative (H_a) is rejected. It means that there is no significance different students' score of students' writing achievement in recount text at tenth grade in SMA Antartika Sidoarjo before and after being taught by using buzz group technique, it means that it is not effective.

Based on the testing using paired sample T-test on SPSS 16 get the score 0.000 it means that $0.000 < 0.005$ and can be concluded that the null hypothesis (H_0) is rejected and the alternative (H_a) is accepted. It means that there is significance different students' achievement of students' ability in recount text at tenth grade in SMA Antartika Sidoarjo before and after being taught by using buzz group technique, it means that it is effective.

E. Discussion

In this research, the researcher conducted the research by using one sample of population. The students of SMA Antartika Sidoarjo were tenth grade, total all of students on X S 3 consisted of 38 students. It has selected by purposive sampling technique in term suggestion by the English teacher in the school. In order to know the result of this research wether this technique is effective or not, the researcher used pre-test and post-test then compute both of the test into SPSS 16.0. The result of computation between pre-test and post-test shows that the use of buzz group technique is effective in teaching writing recount text ability.

The analysis data by using SPSS 16.0 that the mean of the pre-test 12.58 and post-test improved into 20.82 after getting treatment. The mean of the pre-test is lower than the post-test ($12.58 < 20.82$), it means the null hypothesis could be rejected, and it can conclude that using buzz group technique in teaching writing recount text was effective on students' writing ability of recount text.

Although, some of students' score of pre-test and post-test were not perfect but it showed post-test were significant than pre-test. On the output paired sample test after calculated the data, it showed t value (Sign. 2-tailed) was 0.040 from comparing with the standard level of significance (0.05). ($0.040 < 0.05$), it means that the alternative hypothesis (H_a) was accepted. It could be concluded that there was significant difference of students' score before and after being taught buzz group technique of students had been improved after getting the treatment by using buzz group technique in teaching writing recount text.

Finding the result by using buzz group technique in teaching writing recount text can increase students' achievements in writing recount text at Senior High School especially at X S 3 students of SMA Antartika Sidoarjo. Based on the mean of pre-test 12.53 becomes 20.82 in post-test. The increasing score above related with the benefit of using buzz group technique in teaching writing recount text.

Regarding on the result of the data analysis above, it is also strongly with previous study as stating that the use of buzz group technique is effective. Ula (2019), this research was a pre-experimental study to find

out whether there is any learning achievement of student who are taught writing explanation text using buzz group technique which is significantly different from those who are taught different level using buzz group technique. The subject of the study were eleventh grade students of MAN 1 Kota Kediri. In order to achieve the objective, the researcher conducted a pre-experimental research. There was one group involved in this research, the one-shot case study. The pre-experimental group was taught explanation text by using buzz group technique. After the group was given treatment, the result of the study shows that the mean post-test score of pre-experimental group was 69.53. Based on the result of the study, it is concluded the technique of buzz group can improve students' writing ability in an explanation text. It was effective and recommended for English teacher as one of reference in teaching and learning process. In this case, the result above was 69.53 and from this research is 51.26. It means that the means of this research is higher than this previous study.

The next previous study conducted by Agustina (2017) entitled "The Effect of Buzz Group Technique on Students' Writing Descriptive Text at The Tenth Grade of SMAN 2 Sekampung East Lampung in Academic Year 2017/2018". This research was true experimental research to find out whether there is any achievement of students who are taught writing descriptive text using buzz group technique. In order to achieve the objective, the researcher conducted an experimental research. She takes X4 class consisted 28 students. After the group was given treatment, the

result of the study shows that the average score of pre test was 57.85 and control group was 71.07. It means that the score of the post test score was higher than the pre test score. Based on the result of this study, it is conclude the buzz group technique can improve students' writing descriptive text. It was effective and recommended for the English teacher as alternative technique to teaching and learning foreign language.

In the other previous study in Science and Education Research of International Conference English language and Teaching (ICOELT 2018) entitled "The Effect of Buzz Group Technique and Clustering Technique in Teaching Writing at the First Class of SMA HKBP 1 Taruntung" stated that there is a significant difference of students' result in writing skill by Pangaribuan and Manik (2017), from the average score of buzz group technique was 77.2, the average score of clustering was 74.5. So, it means that there was an improvement of students score after they got treatments.

Stated on Preceeding of International Journal of Theory and Application in Elementary and Secondary School Education (IJTAESE 2019) by Arisman entitled buzz group technique as teaching method, based on the researcher stated that buzz group technique is an effective technique to gather information and ideas in a short time, very useful to help the students in finding ideas at the beginning of writing activity by using buzz group technique makes the student actively participate in the learning process and build a positive interaction among the students, even

the students will be more confident to express their points of view through the discussion and allows everyone's ideas to be expressed. Based on the statement of the researcher, it can prove that buzz group technique that the other used, it can be a technique of teaching writing to be more effective, creative, and other to make a product of writing.

Overall it can be said that buzz group as technique in teaching writing recount text is also suitable in writing essay, recount text or just writing assignment. Moreover, teaching writing is effective to increase students' achievement in the level of tenth grade students of SMA Antartika Sidoarjo.