CHAPTER IV

RESEARCH FINDING AND DISCUSSION

In this discussion, the researcher presents the finding of the research. It presents some discussions dealing with the collected data of students' pre-test and post-test score from experimental and control group. This chapter covers the description of data, hypothesis testing, and discussion.

A. Data Description

Data description has a purpose to show the result of research. The subjects of the research were the eleventh grade students at MAN 1 Tulungagung which 27 students of 11 MIA U 1 as experimental group and 28 students of 11 MIA U 2 as control group. In this chapter, the researcher showed the students score in pre-test and post-test in both of classes. This research was conducted in four meetings. The first meeting was conducted pretest which included administered test. This action had conducted to know the students' ability in writing ability before the researcher conducted the treatment using talking chips strategy. In the second until fourth meetings, the researcher conducted a treatment (teaching material) using talking chips strategy, but used different topic in each meeting. In the fifth meeting, the researcher conducted the post-test through discussion using talking chips strategy in the experimental group. The final result of students' writing after doing all of the steps In

process writing in pretest and posttest then were analysed by using writing scoring rubric.

a. The data from the score of experimental group have been obtained as in the following:

Table 4.1 The Scores of Pre-test and Post-test in the Experimental group

No.	Name of Students	Score	
		Pre-test	Post-test
1.	A.S.M	78	90
2.	A.L.H	66	81
3.	C.L.A	53	79
4.	D.P.S	70	80
5.	G.H.T	54	75
6.	G.T.P	75	80
7.	I.K	75	90
8.	I.N.N	59	74
9.	J.I.F	70	78
10.	L.F	75	88
11.	M.A.L.A	70	85
12.	M.S	60	66
13.	M.K	62	83
14.	N.A.S	70	82
15.	N.A.T	70	87
16	N.N.K	60	85
17.	N.L	58	79
18.	R.F	80	91
19.	R.A	65	75
20.	R.A.L	82	96
21.	S.M.Z	52	64
22.	S.W.F	73	76
23.	S.A.N	66	83
24.	V.A.R	71	86
25.	V.D.P	52	62
26.	Y.N.W	71	83
27.	Z.U.N	63	79
SUM		**1800**	**2175**

b. The data from the score of control class have been obtained as in the following:

Table 4.2 The Scores of Pre-test and Post-test in the Control group

No	Name of Students	Score	
		Pre-test	Post-test
1.	A.F.N	70	79
2.	A.Q.N	71	75
3.	A.S	73	77
4.	A.H.F.A	66	54
5.	E.Y.I	70	60
6.	H.N.A	57	62
7.	H.V.R.A	61	60
8.	I.M.S	65	70
9.	J.F.A	40	50
10.	J.F	60	66
11.	L.O	50	51
12.	L.R.Z	63	63
13.	M.N.R.M	72	66
14.	N.N.N	60	64
15.	N.M.S	69	79
16	N.N.P	70	80
17.	N.A.I	56	68
18.	R.N	45	48
19.	R.N.W	77	84
20.	R.N.R	50	50
21.	R.N.R.F.N	51	60
22.	S.N.R	69	68
23.	T.C	60	75
24.	T.I.C	70	70
25.	W.Z.K	55	55
26.	Y.F.C	76	80
27.	Z.N	68	68
28.	Z.K.N	75	62
SUM		**1769**	**1844**

1. Result of Pre-test

The pre-test was done by asking students to write a paragraph of analytical exposition with topic which has been selected by the researcher. In the pre-test there were 27 students in the experimental group and 28 students in the control group. Pre-test was administered to the experimental group and control group to know the writing skill of the students and to know the students achievement before receiving the treatment.

And then, the researcher collected the score used SPSS 16.00 program which the result of descriptive of statistic pre-test between experimental group and control group as below:

Table 4.3 Statistics Pre-test Experimental Group

N	Valid	27
	Missing	0
Mean		**66.6667**
Std. Error of Mean		1.65466
Median		70.0000
Mode		70.00
Std. Deviation		8.59785
Variance		73.923
Range		30.00
Minimum		52.00
Maximum		82.00
Sum		1800.00

Based on table 4.2 above it can seen that the mean score is 66,67. It means that the average score of 27 students in the experimental group

was 66. Where, most of the students can wrote the ideas based on the topic although there were some aspects that they wrote still less; such as content and organization which most of them still not correlate or lack detail. Meanwhile in the pre-test, the low score was 52 and high score 82.

Table 4.4 Frequency Pre-test of Experimental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	52	2	7.4	7.4	7.4
	53	1	3.7	3.7	11.1
	54	1	3.7	3.7	14.8
	58	1	3.7	3.7	18.5
	59	1	3.7	3.7	22.2
	60	2	7.4	7.4	29.6
	62	1	3.7	3.7	33.3
	63	1	3.7	3.7	37.0
	65	1	3.7	3.7	40.7
	66	2	7.4	7.4	48.1
	70	5	18.5	18.5	66.7
	71	2	7.4	7.4	74.1
	73	1	3.7	3.7	77.8
	75	3	11.1	11.1	88.9
	78	1	3.7	3.7	92.6
	80	1	3.7	3.7	96.3
	82	1	3.7	3.7	100.0
	Total	27	100.0	100.0	

Then based on table 4.2 the median score was 70, which if seen in the table above that 18 students who got score less than 70 and 9 students

who got score more than 70. Then the mode score also 70 It means that the most frequent score was 70. Therefore, many students got score 70.

Table 4.5 Statistics Pre-test Control Group

N	Valid	28
	Missing	0
Mean		**63.1786**
Std. Error of Mean		1.84524
Median		65.5000
Mode		70.00
Std. Deviation		9.76408
Variance		95.337
Range		37.00
Minimum		40.00
Maximum		77.00
Sum		1769.00

Based on table 4.4 above it can seen that the mean score was 63.18. It showed that mean in control group was lower than experimental group. It means that the summarize score of 28 students in the control group was 63. Where, if in the control group most of the students can wrote the ideas based on the topic, but most of the text still inadequate development of topic and lacks logical sequencing and development. Meanwhile in the pre-test of control group the low score was 40 and high score 77.

Table 4.6 Frequency Pre-test of Control Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	1	3.6	3.6	3.6
	45	1	3.6	3.6	7.1
	50	2	7.1	7.1	14.3
	51	1	3.6	3.6	17.9
	55	1	3.6	3.6	21.4
	56	1	3.6	3.6	25.0
	57	1	3.6	3.6	28.6
	60	3	10.7	10.7	39.3
	61	1	3.6	3.6	42.9
	63	1	3.6	3.6	46.4
	65	1	3.6	3.6	50.0
	66	1	3.6	3.6	53.6
	68	1	3.6	3.6	57.1
	69	2	7.1	7.1	64.3
	70	4	14.3	14.3	78.6
	71	1	3.6	3.6	82.1
	72	1	3.6	3.6	85.7
	73	1	3.6	3.6	89.3
	75	1	3.6	3.6	92.9
	76	1	3.6	3.6	96.4
	77	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Based on table 4.4 the median score was 65, there were based on table 4.5 which 14 students who got score less than 65 and 14 students who got score more than 65. And then the mode score was 70. It means

that the most frequent score was 70. Therefore, many students got score 70.

So, it can be concluded that between experimental group and control group there was different mean and median in which the mean and median in experimental group was higher than control group, but both of that classes have same mode in the pre-test.

2. Result of Post-test

The post-test was administered by asking the students to write an analytical exposition with different topic. Similar to the pre-test there were 27 students in the experimental group and 28 students in the control group. It was done after treatments. This test was intended to know the students writing achievement in analytical exposition after using talking chips technique in experimental group.

About the process of post-test, there was a difference between experimental group and control group, in which in experimental group the students went through discussion using talking chips before they made an analytical exposition text. Whereas in control group they did not go through anything method.

After gaining the score, the researcher calculated the score using SPSS 16.00 program. The result of post-test between experimental group and control group as below:

Table 4.7 Statistics Post-test Experimental Group

N	Valid	27
	Missing	0
Mean		**80.5556**
Std. Error of Mean		1.58009
Median		81.0000
Mode		79.00[a]
Std. Deviation		8.21037
Variance		67.410
Range		34.00
Minimum		62.00
Maximum		96.00
Sum		2175.00

As explanation before that post-test given after did some treatments. The mean score of post-test in experimental group was 80. It means there was a increase between mean in pre-test and mean in post-test, which mean in the pre-test was 66, in the post-test was 80. It showed that there was improvement in students' writing achievement before and after being taught by using talking chips technique. Not only there was improvement in mean but also in median and mode in the post-test. The median and mode in pre-test was 70. But, in post-test median was 81 and mode was 79. Meanwhile in the post-test, the low score was 62 and high score was 96.

Table 4.8 Frequency Post-test of Experimental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	62	2	7.4	7.4	7.4
	66	1	3.7	3.7	11.1
	74	1	3.7	3.7	14.8
	75	2	7.4	7.4	22.2
	76	1	3.7	3.7	25.9
	78	1	3.7	3.7	29.6
	79	3	11.1	11.1	40.7
	80	2	7.4	7.4	48.1
	81	1	3.7	3.7	51.9
	82	1	3.7	3.7	55.6
	83	3	11.1	11.1	66.7
	85	2	7.4	7.4	74.1
	86	1	3.7	3.7	77.8
	87	1	3.7	3.7	81.5
	88	1	3.7	3.7	85.2
	90	2	7.4	7.4	92.6
	91	1	3.7	3.7	96.3
	96	1	3.7	3.7	100.0
	Total	27	100.0	100.0	

From the table above it showed that median of post-test was 81 and the mode was 79. It means that the most frequent score was 79. In other word many students got score 79. And based on the frequency distribution (see in table 4.7) it showed that there were 14 students who got score less than 81 and there were 13 students who got score more than 81.

Table 4.9 Statistics Post-test Control Group

N	Valid	28
	Missing	0
Mean		**65.8571**
Std. Error of Mean		1.94482
Median		66.0000
Mode		60.00[a]
Std. Deviation		1.0291E1
Variance		105.905
Range		36.00
Minimum		48.00
Maximum		84.00
Sum		1844.00

In the control group, the researcher also administered post-test, but did not go through discussion using talking chips like experimental group. The mean of post-test in the control group was 65, it means there was incresing between in pre-test and post-test, but only little incresing, in which the pre-test was 63 in the post-test was 65. Not only in mean, but also there was a little improvement in median which in the pre-test 65 to be 66. But, different with experimental group which there was an improvement in mode, in the control group there was a lowering which in the pre-test 70 to be 60 in the post-test. Meanwhile in the post-test, the low score was 48 and high score was 84.

Table 4.10 Frequency Post-test of Control Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	48	1	3.6	3.6	3.6
	50	2	7.1	7.1	10.7
	51	1	3.6	3.6	14.3
	54	1	3.6	3.6	17.9
	55	1	3.6	3.6	21.4
	60	3	10.7	10.7	32.1
	62	2	7.1	7.1	39.3
	63	1	3.6	3.6	42.9
	64	1	3.6	3.6	46.4
	66	2	7.1	7.1	53.6
	68	3	10.7	10.7	64.3
	70	2	7.1	7.1	71.4
	75	2	7.1	7.1	78.6
	77	1	3.6	3.6	82.1
	79	2	7.1	7.1	89.3
	80	2	7.1	7.1	96.4
	84	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Based on table 4.8 showed that median was 66 and mode was 60, It means that the most frequent score was 60, if about frequency distribution (see in table 4.9) it showed that there were 15 students who got less than 66 and there were 13 students who got more than 66.

From the result of calculation of post-test between experimental and control group, it can be concluded that there was improvement scores in both of groups, it seen in the explanation before. Although in the both

of groups there were improvement, but improvement in the experimental group was higher.

Table 4.11 Descriptive Group Statistics

KELAS		N	Mean	Std. Deviation	Std. Error Mean
SCORE	MIA U1 (E)	27	**80.5556**	8.21037	1.58009
	MIA U2 (C)	28	**65.8571**	10.29100	1.94482

As table 4.10 showed that mean in post-test of experimental group was higher than mean of control group. It indicated that in the average, the use of talking chips has caused the improvement of students' writing achievement, but it was important to know that such a conclusion was only a descriptive conclusion.

B. Hypothesis Testing

The hypothesis testing of this study as follows:

1. When the significant level is less than 0.05, the alternative hypothesis (Ha) is accepted and null hypothesis (Ho) is rejected. It means that there is significant effect of using talking chips on students' achievement in writing analytical exposition text

2. When the significant level is more than 0.05, the null hypothesis (Ho) is accepted and alternative hypothesis (Ha) is rejected. It means that there is no significant effect of using talking chips on students' achievement in writing analytical exposition text

After organizing the frequency and the percentage of score from pre-test and post-test, the means, the medians, the standard deviations, the variances, the minimum and the maximum of the writing pre-test and post-test scores of the sample. Therefore, to investigate whether talking chips gave effect on students' achievement in writing analytical exposition text. The researcher tested the result of post-test by using Independent Samples T-Test in SPSS 16.00 program.

Table 4.12 Independent Samples T test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	Df	**Sig. (2-tailed)**	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	2.289	.136	5.842	53	**.000**	14.69841	2.51612	9.65171	19.74511
Equal variances not assumed			5.866	51.229	**.000**	14.69841	2.50579	9.66837	19.72845

Referring to Table 4.5, shows that in Levene's Test for Equality of Variances, it seen that F= 2.289 (p=0,136) because of p higher than 0.05, it indicated that there is no difference in variance data or in the other words data was equal/homogenous. If the data was homogeneous, see on the result of *equal variances assumed*. As can be seen in table above showed that D*f* (Degree of freedom) was 53. Therefore, the way to test whether the null hypothesis can be rejected was by comparing p-value with the standard level of significance, 0.05. The convention to reject the null hypothesis was when the p-value of the obtained statistics was less than 0.05 (Balnaves & Calputi, 2001). As table 4.11 showed, the p-value was less than 0.05 (0.000<0.05). Thus, there was enough evidence indicating that the null hypothesis could be rejected, and it could be concluded that there was significant effect of using talking chips on students' achievement in writing analytical exposition text.

C. Discussion

In this part, the researcher presents the discussion of data analysis which has shown in the previous sub chapter. In this case the writer divided discussion about data analysis which it intended to find out the effectiveness of talking chips on the students writing achievement, it can be identified through the result of pre-test and post- test experimental group and control group. Based on the data analysis, the Sig. (2-tailed) was 0.000. It means that the significance level was less than 0.05 (0.000 <

0.05). Thus, the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. Therefore there was significant difference in students' writing achievement before and after taught by using talking chips technique. In other word, talking chips technique give signifficant effect to the students' writing achievement.

In addition, It could be seen from the students' score in pre-test and in post-test that were conducted by the researcher on January 6th 2018 and on January 20th 2018, that there was an improvement of mean from pre-test 66.67 to post-test 80.56. It showed that the students get good improvement in their writing achievement after teaching using talking chips.

Whereas, in the pre-test the researcher found common mistakes on the content which the content of text mostly not related with the topic and lack detail about the topic, beside that the argumentative paragraph still can not support the thesis. In other aspect was on the orgaization especially in language use such as firstly, secondly etc is still less. And the common mistakes mostly did on paragraphing, capitalization and errors of spelling which still ignored by the students.

After the students received treatments, the result showed that talking chips technique give good impact on students' text especially in content aspect and in organization which there was improvement more correlated and develop the topic. The improvement in content aspect caused because of talking chips give good impact in students' critical thinking skill, knowledge and communication skill were developed in the

classroom discussion. Not only that talking chips also give good impact on the students variaty and quality of their arguments which before received the treatment mostly their argument only focus on little aspect and mostly influenced by their background knowledge as the science students, but after received the treatments their argument more various which they can give argument in many aspects, such as social, health, economic etc. This finding was in line with Kagan, (2009: 6.24) statement who stated that talking chips technique was useful in developing student's skill on team building, thinking skill and knowledge building. Because in this activity students should develop a topic become text. It needs creative thinking.

In addition, during the treatment many students showed that they could improve their critical thinking skill and knowledge building. Thinking skill was mental processes used to do things like solve problems, make decisions, ask questions, construct plans, evaluate ideas, organize information and create objects. After that knowledge building, it refers to the process of creating new cognitive artifacts as a result of common goals, group discussions, and synthesis of ideas. Which thinking skill and knowledge building needed when the students want to write analytical exposition, it caused like explanation in previous chapter about the characteristic of analytical exposition itself that same like argumentative essay. It needed more knowledge and critical thinking related the topic to make an analytical exposition text which can support the topic and

persuade the reader that the idea is important matter appropriate as the social function of analytical exposition.

Besides conducting treatments, the researcher did general evaluation which was conducted each meeting before treatment. General evaluation did not only help the students to evaluate their text, but also helped the researcher to know the progress of students text after receiving the treatments. General evaluation was done that the researcher explain the common mistakes which the students did and give the evaluation about the mistakes. In the previous explanation the research has explained that the common mistakes was done by the students are mostly on content, organization, errors of spelling, paragraphing and capitalization, and from general evaluation the researcher found the progress after was done treatments, which in the pre-test the content still can not related with the topic and can not support the thesis, after received the treatments the content of text has relevant to topic and develop the thesis. The finding was in line with the statement from Joseph *et al* (1993: 43) who stated that talking chips technique can ensure all students in a group share their ideas. Not only showed the progress of treatments on the content, general evaluation also gave progress on errors of spelling, paragraphing and capitalization which before those are frequently occurs become few occurs on the students text.

Although, also there was improvement mean in control group from 63 in pre-test to be 65 in post-test, improvement mean in control group

caused there was progress in their text, especially in language use, paragraphing and capitalization after explained about analytical exposition text use traditional teaching. Which it gave little improvement in post-test text of some students in control group. But, in content and organization in students text of control group still lack detail and inadequate develop the topic and most of students text there is no improvement between pre-test text and post-test text in content, different in the students text in experimental group.

Beside that, the students who previously spoke less became more active in every meeting. There were some students who were shy to speak in English, like in previous chapter, especially in the research which was conducted by Purwanti (2015) who found that talking chips can made students which less in speaking to be more active to speak. In the previous chapter, it was explained that talking chips often used to improve students speaking ability. It showed that apply talking chips strategy was proved to be effective in give the students more opportunity to practice speaking, as explained in the research conduct by Syafryadin (2015) that talking chips was very effective to be used to make the students active in teaching speaking. In addition, this technique tries not to make the speaking activity in the class dominated by students which active in speaking only. Which if in discussion dominated by students which active in speaking only, it could influenced on the ideas which they got if only still some students give opinion, but if using talking chips more students got oppurtunity to

speak to give opinion make more ideas and supporting ideas that they can got. Its means all students have the same opportunity in the group discussion to give opinion or ideas.

Based on explanation above, it can be said that talking chips give a significant effect on the students eleventh grade achievement in writing analytical exposition text at MAN 1 Tulungagung. It could be seen from the description of research finding above, which this research support the previous study that talking chips appropriate to improvement on students speaking, but not only support findings on previous study, this research also find that talking chips give improvement on students' writing achievement which apply talking chips in the discussion to get many ideas and can give improvement on their variety and quality of arguments. This research also give continuous on previous study that after students speaking use talking chips there is continuous activity which students can do, it was writing activity like this research did. Although, talking chips can improve students' achievement on writing, but this method still there was a weakness in application which the time allocation most used in discussion, especially if apply on the class that has many students, because each students must give opinion and each students has 2 minutes for a opinion. Beside on finding above the teacher can apply talking chips technique in teaching English especially in writing analytical exposition text which can consider the weakness.