

CHAPTER IV

FINDING AND DISCUSSION

In this subchapter content of Finding and Discussion which has been collected during the research process.

1. Findings

The data collected from the two classes that class consist of 13 male and 21 female in X-3(control group) and consist of 11 male and 19 female in X-1(experimental group). Both of them in similar level of the ability or regular class. The final score of students' writing after doing all of steps in process of writing in pre test and post test then were analyzed by using writing scoring rubric. Unfortunately, some students' was absent in day of pre test or post test and the researcher decides to cut their name on the table of score. The result of pre-test and post-test both classes is described in this table below.

A. Student's Ability in Writing Descriptive Text Assessed by using Peer Assessment through WhatsApp of Experimental Group

Table 4.1 and 4.2 The Result of Students' Writing before and after Using Peer Assessment through WhatsApp in Experimental Group.

NO	NAMA	L/P	Score in pretest
1	A A	L	68
2	A D	P	66
3	A V	P	60

NO	NAMA	L/P	Score in Posttest
1	A A	L	71
2	A D	P	72
3	A V	P	77

4	AA	P	60
5	AR	P	59
6	BA	P	57
7	BRO	L	66
8	CN	P	69
9	DA	P	69
10	DF	L	69
11	EAP	P	61
12	HA	L	60
13	HS	P	45
14	KY	L	57
15	LNR	P	67
16	MRK	L	60
17	NV	P	60
18	NAT	P	52
19	NA	L	65
20	NI	P	59
21	PPS	P	55
22	RSY	P	57
23	SW	L	52
24	SAW	P	68
25	TNI	P	52
26	YMS	P	61
27	YW	L	72
	SUM		1646

4	AA	P	77
5	AR	P	71
6	BA	P	67
7	BRO	L	74
8	CN	P	70
9	DA	P	71
10	DF	L	76
11	EAP	P	75
12	HA	L	76
13	HS	P	71
14	KY	L	77
15	LNR	P	73
16	MRK	L	75
17	NV	P	71
18	NAT	P	79
19	NA	L	75
20	NI	P	70
21	PPS	P	77
22	RSY	P	71
23	SW	L	71
24	SAW	P	74
25	TNI	P	75
26	YMS	P	71
27	YW	L	77
	SUM		1984

The data set meaningful after the reasearcher organized the frequency and the percentage of score in pre-test by using SPSS 20 IBM. Table 4.3 and Figure4.1.

Table 4.3 Frequency of Score in Pretest of Experimental Group

		pretest	posttest
N	Valid	27	27
	Missin g	0	0

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	45	1	3,7	3,7
	52	3	11,1	14,8
	55	1	3,7	18,5
	57	3	11,1	29,6
	59	2	7,4	37,0
	60	5	18,5	55,6
	61	2	7,4	63,0
	65	1	3,7	66,7
	66	2	7,4	74,1
	67	1	3,7	77,8
	68	2	7,4	85,2
	69	3	11,1	96,3
	72	1	3,7	100,0
	Total	27	100,0	100,0

Based on the table 4.3 students 3,7% got 45, 3 students' 11,1% got 52, 1 student 3,7% got 55, 3 students 11,1% got 57, 2 students 7,4% got 59, 5 students 18,5% got 60, 2 student 7,4% got 61, 1 student 3,7% got 65, 2 students' 7,4% got 66, 1 student 3,7% got 67, 2 students' 7,4% got 68, 3 students' 11,1% got 69 and 1 students 3,7%% got 72. This result finding considering that students only used their backround knowledge without any input before about how to write good

descriptive writing. So their score will gained after the threatment and show in the next part of this pretest data view.

After got threatment (peer assessment) the students got improved their result in post test. 1 student 3,7% got 67, 2 students 7,4% got 70, 8 students 29,6% got 71, 1 student 3,7% got 72, 1 student 3,7% got 73, 2 students' 7,4% got 74, 4 students 14,8% got 75, 2 students' 7,4% got 76, 5 students' 18,5% got 77, 1 student 3,7% got 79.

Table 4.4 Frequency of Score in Pretest of Experimental Group

POSTTEST				
	Frequency	Percent	Valid Percent	Cumulative Percent
67	1	3,7	3,7	3,7
70	2	7,4	7,4	11,1
71	8	29,6	29,6	40,7
72	1	3,7	3,7	44,4
73	1	3,7	3,7	48,1
Valid 74	2	7,4	7,4	55,6
75	4	14,8	14,8	70,4
76	2	7,4	7,4	77,8
77	5	18,5	18,5	96,3
79	1	3,7	3,7	100,0
Total	27	100,0	100,0	

Besides the tables, the researcher showed the statistic data of students' pretest and post-test score. The data was showed below.

Table 4.5. Statistic Data of Students' Pre-test and Post-test Score in Experimental Group

		Statistics	
		PRETEST	POSTTEST
N	Valid	27	27
	Missing	0	0
Mean		60,96	73,48
Std. Error of Mean		1,257	,576
Median		60,00	74,00
Mode		60	71
Std. Deviation		6,531	2,992
Variance		42,652	8,952
Range		27	12
Minimum		45	67
Maximum		72	79
Sum		1646	1984

Based on the data statistics of students' pre and post test the mean of the pre-test and post-test was 60,96 improved as 73,48 in the post-test. That median in the pretest was 60,00 and 74,00 in the post test. The mode was 60 and 71 in pretest and post-test if there was (^a) the value was multiple modes exist. The smallest value is shown. The standart deviation in pretest was 6,531 and in the post-test was 2,992. The variance was 42,652 in pretest and 8,952 in the post-test. The range in the pretest was 27 and in the post-test was 12. The minimum score in the pre test was 45 and 67 in the post-test. And the maximum score was 72 in the pretest and 79 in the post-test. And finally the summary of both test was 1646 in pretest and 1984 in the post-test. Then, the researcher make the categorization of the students' score as follow;

Table 4.6. Categorization of Experimental Group**Pretest**

Intervals	Frequency	Categorization	Precentage
90-100	0	Excelent	0
80-89	0	Good	0
70-79	1	Fair	3,7%
60-69	16	Poor	59,2%
≤59	10	Very Poor	37,1%

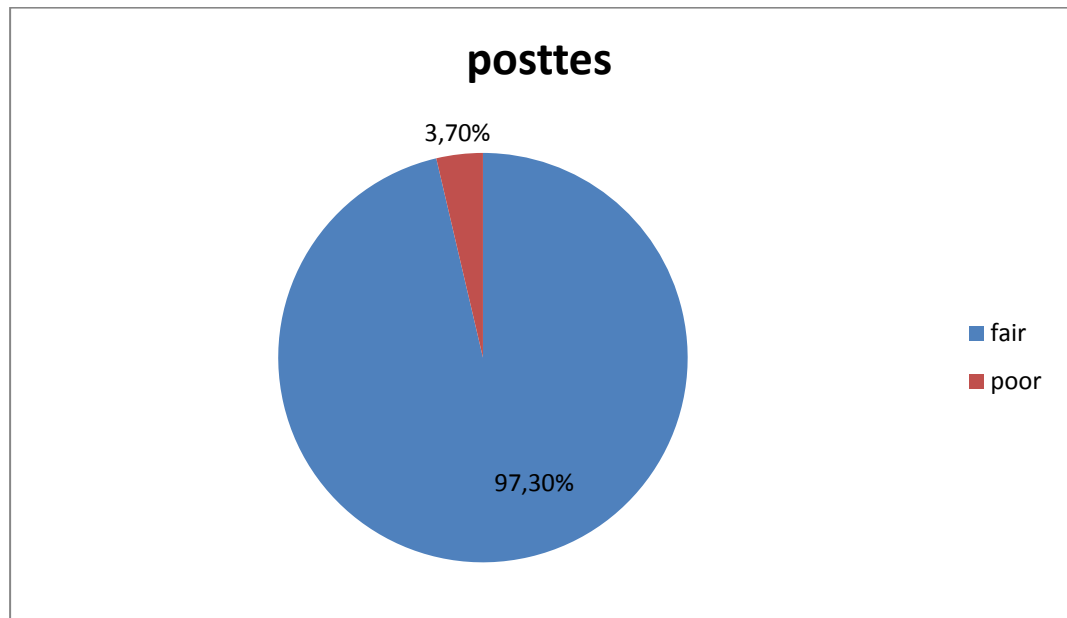
Based on the table of the categorization of experimental group the interval 90-100 and 80-89 was none, student in the categorization of fair was 1 student the interval was 70-79, students' in the categorization of poor was 16 students' the interval was 60-69 and students' in the categorization of very poor was 10 students' the interval was less than 59. In conclusion, the biggest categorization was poor.

Postest

Intervals	Frequency	Categorization	Precentage
90-100	0	Excelent	0
80-89	0	Good	0
70-79	26	Fair	97,3%
60-69	1	Poor	3,7%
≤59	0	Very Poor	0

Based on the table of the categorization of experimental group in post test the interval 90-100 and 80-89 was none, student in the categorization of fair was 26 or 97,3% students' the interval was 70-79, student in the categorization of poor was 1 student the interval was 60-69. In conclusion, the biggest categorization was fair. The data of students' score categorization was conclude in the pie diagram below;

Figure 4.1 Pie Diagram of Students' Score Categorization



Based on the pie diagram of students' score categorization above the major of the colour in the pie diagram was blue as 'Fair' categorization. And, red as the 'poor' categorization as in the legend. And 3,70% in the categorization of 'poor' and 97,30% in the categorization of 'fair'. It is gained from the pretest.

B. Student's Ability in Writing Descriptive Text Without Assessed by using Peer Assessment through WhatsApp of Experimental Group

Table 4.7 and 4.8 The Result of Students' Writing before and after the test in Controlled Group.

NO	NAMA	L/P	Score in pretest
1	A C	L	59
2	A T	P	59
3	A O	P	76
4	A K	L	63
5	B P	L	59
6	B A E	L	63
7	C M	P	63
8	D A	P	59
9	D P	P	59
10	D E	L	60
11	E R D	P	59
12	I S S	P	63
13	I Y	L	59
14	I	P	64
15	L S P	L	59
16	M F A	L	59
17	N R	P	64
18	N A	P	67
19	N A P	P	63

NO	NAMA	L/P	Score in post-test
1	A C	L	67
2	A T	P	67
3	A O	P	74
4	A K	L	68
5	B P	L	59
6	B A E	L	66
7	C M	P	66
8	D A	P	62
9	D P	P	66
10	D E	L	61
11	E R D	P	60
12	I S S	P	66
13	I Y	L	60
14	I	P	68
15	L S P	L	63
16	M F A	L	58
17	N R	P	72
18	N A	P	68
19	N A P	P	59

20	O Y	L	64
21	R C	P	60
22	S I	P	64
23	S F	P	59
24	T W	P	61
25	U A A	L	64
26	Y D P	P	76
27	Z A	L	64
	SUM		1689

20	O Y	L	65
21	R C	P	61
22	S I	P	69
23	S F	P	64
24	T W	P	63
25	U A A	L	70
26	Y D P	P	76
27	Z A	L	70
	SUM		1768

After the researcher found the result of experimental group we also found and checked the data collected from controlled group. The result of the controlled group after they got the pre-test and post-test without got threatment like the experimental group, peer assessment through WhatsApp (traditional method).

Table 4.9 Frequency of Score in Pretest of Controlled Group

PRETEST				
	Frequency	Percent	Valid Percent	Cumulative Percent
	59	10	37,0	37,0
	60	2	7,4	44,4
	61	1	3,7	48,1
	63	5	18,5	66,7
Valid	64	6	22,2	88,9
	67	1	3,7	92,6
	76	2	7,4	100,0
	Total	27	100,0	100,0

Based on the table 4.7, 10 students 37,0% got 59, 2 students 7,4% got 60, 1 student 3,7% got 61, 5 students 18.5% got 63, 6 students 22,2% got 64, 1

student 3,7% got 67 and 2 students 7,4% got 76. This result finding considering that students only used their background knowledge without any input before about how to write good descriptive writing.

After material about writing descriptive text the students got improved their result but also there was some students that got less score than their pre test in post test. 1 students 3,7% got 58, 2 students 7,4% got 58, 2 student 7,4% got 60, 2 students 7,4% got 61, 1 student 3,7% got 62, 2 students 7,4% got 63, 1 student 3,7% got 64, 1 student 3,7% got 65, 4 students 14,8% got 66, 2 students 7,4% got 67, 3 students 11,1% got 68, 1 student 3,7% got 69, 2 students 7,4% got 70, 1 student 3,7% 72, 1 student 3,7% got 74 and 1 student 3,7% got 76. The data was showed below;

Table 4.10 Frequency of Score in Post-test of Controlled Group

POSTTEST				
	Frequency	Percent	Valid Percent	Cumulative Percent
58	1	3,7	3,7	3,7
59	2	7,4	7,4	11,1
60	2	7,4	7,4	18,5
61	2	7,4	7,4	25,9
62	1	3,7	3,7	29,6
63	2	7,4	7,4	37,0
64	1	3,7	3,7	40,7
65	1	3,7	3,7	44,4
Valid 66	4	14,8	14,8	59,3
67	2	7,4	7,4	66,7
68	3	11,1	11,1	77,8
69	1	3,7	3,7	81,5
70	2	7,4	7,4	88,9
72	1	3,7	3,7	92,6
74	1	3,7	3,7	96,3
76	1	3,7	3,7	100,0
Total	27	100,0	100,0	

Related to the tables, the researcher showed the statistic data of students' pretest and post-test score. The data was showed below.

Table 4.11 Statistic Data of Students' Pre-test and Post-test Score in Experimental Group

		Statistics	
		PRETEST	POSTTEST
N	Valid	27	27
	Missing	0	0
Mean		62,56	65,48
Std. Error of Mean		,874	,902
Median		63,00	66,00
Mode		59	66
Std. Deviation		4,543	4,685
Variance		20,641	21,952
Range		17	18
Minimum		59	58
Maximum		76	76
Sum		1689	1768

Based on the data statistics of students' pre and post test the mean of the pre-test and post-test was 62,56 improved as 65,48 in the post-test. That median in the pretest was 63,00 and 66,00 in the post test. The mode was 59 and 66 in pretest and post-test. The standart deviation in pretest was 4,543 and in the post-test was 4,685. The variance was 20,641 in pretest and 21,952 in the post-test. The range in the pretest was 17 and in the post-test was 18. The minimum score in the pre test was 59 and 66 in the post-test. And the maximum score was 76 in the pretest and 76 in the post-test. And finally the summary of both test was 1689 in pretest and 1768 in the post-test. Then, the researcher make tyhe categorization of the students' score as follow

Table 4.12 Categorization of Control group**Pretest**

Intervals	Frequency	Categorization	Precentage
90-100	0	Excelent	0
80-89	0	Good	0
70-79	2	Fair	7,4%
60-69	15	Poor	55,5%
≤59	10	Very Poor	37%

Based on the table of the categorization of experimental group the interval 90-100 and 80-89 was none, student in the categorization of fair was 2 or 7,4% students' the interval was 70-79, students' in the categorization of poor was 15 or 55,5% students' the interval was 60-69 and students' in the categorization of very poor was 10 or 37% students' the interval was less than 59. In conclusion, the biggest categorization was poor.

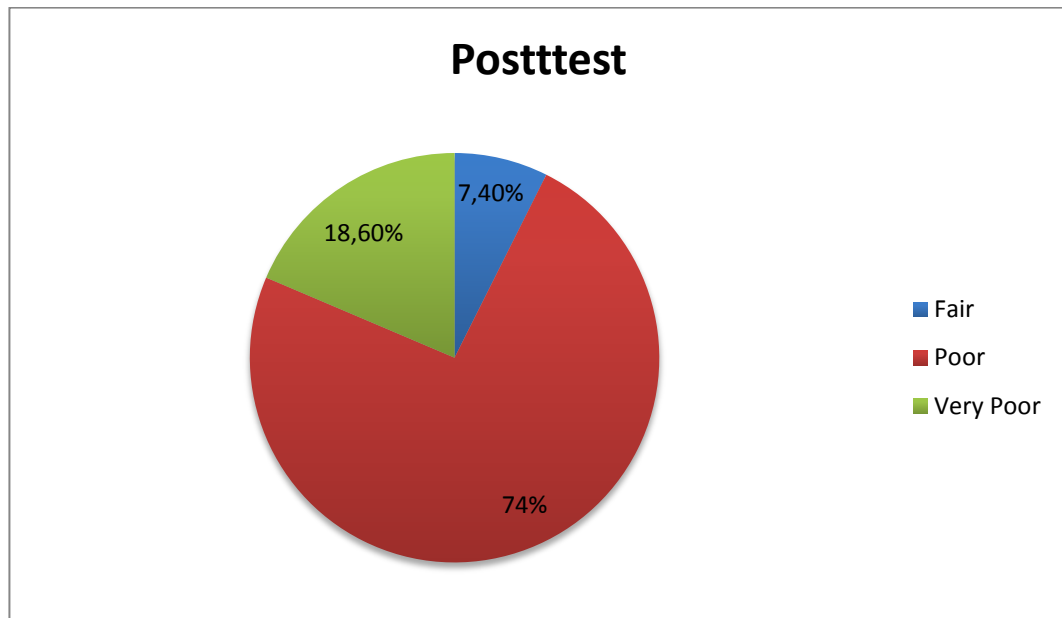
Posttest

Intervals	Frequency	Categorization	Precentage
90-100	0	Excelent	0
80-89	0	Good	0
70-79	2	Fair	7,4%
60-69	20	Poor	74%
≤59	5	Very Poor	18,6%

Based on the table of the categorization of experimental group the interval 90-100 and 80-89 was none, student in the categorization of fair was 2 or 7,4%

students' the interval was 70-79, students' in the categorization of poor was 20 or 74% students' the interval was 60-69 and students' in the categorization of very poor was 5 or 18,6% students' the interval was less than 59. In conclusion, the biggest categorization was poor but the differences from the post test was the 'very poor' categorization in pretest was decreased. The data of the categorization of control group was conclude in the pie diagram below;

Figure 4.2 pie diagram of students' score categorization



Based on the pie diagram of students' score categorization above the major of the colour in the pie diagram was red as 'poor' categorization, the blue as the 'fair' categorization . And, green as the 'very poor' categorization as in the legend. And 7,4% in the categorization of 'fair', 74% of the categorization of 'poor' and 18,60% in the categorization of 'very poor'. It is gained from the pretest.

The researcher only compared the students' score of post test because the pretest score of experimental and controlled group were normal and homogeneous. The researcher compared students' score of post-test both of group

that consisted of highest score in post-test , lowest score and the mean score of each group from students' score in post-test to know wheter the students' comprehension was getting down, same, or different. The result of difference of statistical data in post-test of controlled group and experimental group can be seen in the table below;

Table 4.13 The Score of Post-Test of Both Classes

NO	NAMA	L/P	SCORE EXPERIMENTAL	NO	NAMA	L/P	SCORE CONTROL
1	AA	L	71	1	AC	L	67
2	AD	P	72	2	AT	P	67
3	AV	P	77	3	AO	P	74
4	AA	P	77	4	AK	L	68
5	AR	P	71	5	BP	L	59
6	BA	P	67	6	BAE	L	66
7	BRO	L	74	7	CM	P	66
8	CN	P	70	8	DA	P	62
9	DA	P	71	9	DP	P	66
10	DF	L	76	10	DE	L	61
11	EAP	P	75	11	ERD	P	60
12	HA	L	76	12	ISS	P	66
13	HS	P	71	13	IY	L	60
14	KY	L	77	14	I	P	68
15	LNR	P	73	15	LSP	L	63
16	MRK	L	75	16	MFA	L	58
17	NV	P	71	17	NR	P	72
18	NAT	P	79	18	NA	P	68
19	NA	L	75	19	NAP	P	59
20	NI	P	70	20	OY	L	65
21	PPS	P	77	21	RC	P	61
22	RSY	P	71	22	SI	P	69
23	SW	L	71	23	SF	P	64
24	SAW	P	74	24	TW	P	63
25	TNI	P	75	25	UAA	L	70
26	YMS	P	71	26	YDP	P	76
27	YW	L	77	27	ZA	L	70
	SUM		1984		SUM		1768

Table 4.14. Statistic of Experimental and Control Group

		Statistics	
		EXPERIMENTA L	CONTROL
N	Valid	27	27
	Missing	0	0
Mean		73,48	65,48
Std. Error of Mean		,576	,902
Median		74,00	66,00
Mode		71	66
Std. Deviation		2,992	4,685
Variance		8,952	21,952
Range		12	18
Minimum		67	58
Maximum		79	76
Sum		1984	1768

Based on the table above, it can be seen the difference of the students' score in post-test of experimental and control group in writing descriptive text were assessed by using peer assessment through WhatsApp and without using peer assessment through WhatsApp to improve students' writing in descriptive. In the statistic of experimental showed that the minimum score was 67 and 58 in control group. The maximum score in the experimental group was 79 and 76 in control group and the mean of experimental group was 73,48 and 65,48 in control group. And the standard deviation was 2,992 in experimental group and 4,685 in control group.

The result above showed that the experimental group was higher than the control group. It showed that there was significant difference between the class were assessed by using peer assessment through WhatsApp and without using peer assessment through WhatsApp to improve students' writing in descriptive in 10th grades SMAN 01 Tulungagung. In other words, the using of peer assessment

through WhatsApp to improve students' ability in writing descriptive text in 10th grades SMAN 01 Tulungagung.

C. Significant Difference on the Students' Ability in Writing Descriptive Text Assessed and Without Taught by Using Peer Assessment Through WhatsApp

There was two hypothesis here that was F and T hypothesis. Before discussing the t-test, the researcher necessary to test the F-test. F-test is used to know the equality of variance of the two group. And, the T-test is used to test the two means(experimental and control group). Although, the f-test was automatically serve in the spss table of t-test, the researcher write down the F hypothesis as the requirement in quasy experiment (experimental and control group). The hypothesis of this research are as follow;

1. Hypothesis testing of F-test

a. $H_0 : \sigma_1^2 = \sigma_2^2$, it means if there is an equal variance between experimental and control group.

b. $H_a : \sigma_1^2 \neq \sigma_2^2$, it means if there is no equal variance between experimental and control group.

1. If *p-value* (Sig) bigger than 0.05 the null hypothesis (Ho) is not rejected. As such, *equal variances* is used.
2. If *p-value* (Sig) less than 0.05 the null hypothesis (Ho) is rejected. As such, *equal variances not assumed* is used.

2. Hypothesis Testing of T-test

- a. Null Hypothesis (Ho)

There is no significant difference on students' writing descriptive text assessed by using peer assessment through WhatsApp.

b. Alternative Hypothesis (H_a)

There is any significant difference on students' writing descriptive text before and after assessed by using peer assessment through WhatsApp.

1. If sig(2-tailed) is smaller than 0,05 the alternative hypothesis (H_a) is rejected and the null hypothesis (H_o) is not rejected.

It means that there is no significant different score of students' achievement in writing descriptive text who was assessed by using and without using peer assessment through WhatsApp.

2. If sig(2-tailed) is bigger than 0,05 the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected.

It means that there is significant different score of students' achievement in writing descriptive text who was assessed using and without using peer assessment through WhatsApp.

To know whether the sig(2-tailed) is bigger or smaller than 0,05 the researcher analyzed the data by using SPSS version 20.0. For the first the researcher test the normality of the data. If sig. >0.05, then the data was normal distribution and if sig<0.05 then the data was not normal distribution. Showed in chapter 3.

Table 4.16 Group Statistics of Two Group

Group Statistics					
	CLASS	N	Mean	Std. Deviation	Std. Error Mean
POSTTEST	1	27	73,48	2,992	,576
	2	27	65,48	4,685	,902

Based on the table 4.16 the data presented the performance scores of the members of two group which the students' who were assessed descriptive writing by using peer assessment through WhatsApp, output independent sample statistics was show that there was mean score differenc between the experimental group(1) and the control group(2). The mean of experimental group was 73,48 and the mean of control group was 65,48. The standarddeviation was 2,992 in experimental group and 4,685 in control group.

Table 4.17 The Result of Analyzing Independent Sample F-test and T-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
POST TEST	3,909	,053	7,478	52	,000	8,000	1,070	5,853	10,147
			7,478	44,182	,000	8,000	1,070	5,844	10,156

Based on the table, the result of F-test shows that *p-value* (sig) is 0.53, and it was bigger than 0.05. in other words, the null hypothesis (Ho) is not rejected. As such, *equal variances assumed* is used.

Considering the result of independent F-test, the equal *variance assumed* is used to interpret the t-test as stated in the table 4.17 showed that Df value was 52 and sig (2-tailed) value was 0.000. to know the significant difference score, sig (2-tailed) value necessary to be compared with the significance level 0.05. It showed that $0.000 < 0.05$. it means that the sig (2-tailed) less than significance level 0.05 and the difference is significant. Thus, the alternative hypothesis (Ha) is not rejected. The hypothesis testing in this research is the first grade students' at SMAN 01 TULUNGAGUNG have better score which are assessed by using peer assessment through WhatsApp in writing descriptive text than without assessed by using peer assessment through WhatsApp in writing descriptive.

2. Discussion

Regarding to the result of the data analysis, it was found that peer assessment through WhatsApp was effective to improve students' writing descriptive text in first grade of SMAN 01 Tulungung. The previous studies also had proved that peer assessment and WhatsApp was effective to improve students' writing skill. The first entitled "The Effectiveness Of Peer Assesment Through Facebook Towards Students' Writing Skill In Narrative Text" by Aziz Awwaludin. But, the differences the first previous study was about the media and the writing skill, the researcher used facebook as the media to be applied and the purpose was to improve the student's narrative writing. But, the step in

applied the peer assessment was the same way. The second was the entitled “The Effectiveness Of Whatsapp Mobile Learning Activities Guided By Activity Theory On Students’ Knowledge Management” by Chokri Bahroumi the similarity from this research was the effectiveness of WhatsApp as the media to improve students’ learning. The researcher proved that the WhatsApp was effective and really needed to be improved in the future. The researcher used this media in activated the theory that used in the students’ learning, this was different from the research in this paper. And, literally not in the same skill that was writing descriptive text. But, this research use the same way in the steps in applied the WhatsApp as the media.

After conducting the research the researcher proved that the peer assessment through WhatsApp was effective to improve the students’ writing descriptive text. Besides that considering the theory in the chapter two the researcher found that some theory running well in the real studies but some theory also had different applied and result in the real studies. The first was from Topping (2010:62) defines peer-assessment as “an arrangement for learners to consider and specify the level, value, or quality of a product or performance of other equal-status learners”. In this research the students’ could identified their level of ability in writing from their peer. The students’ also got the comment that became the object to discuss and revise until the final result was done as the statement, Peer-assessment is “an educational arrangement where students judge a peers’ performance quantitatively and/or qualitatively and which stimulates students to reflect, discuss and collaborate” Strijbos & Sluijsmans (2010: 265) and Robert (2006:80) declares peer-assessment as “the process of having the readers critically reflect upon, and perhaps suggest grades for the learning of their peers”.

Besides that the research also used the standart of scoring in the process of the studies that supported by Falchikov (2005:27) refers to another aspect of peer-assessment and reports that in peer-assessment “students use criteria and apply standards to the work of their peers in order to judge that work”. But, in the classroom the students got the standards of scoring or commenting according to the trheatment before the test. And the teacher used the standard scoring from Brown & Bailey (1984). The use of standards scoring also supported by Falchikov (2007:132) “Peer assessment requires students to provide either feedback or grades (or both) to their peers on a product or a performance, based on the criteria of excellence for that product or event which students may have been involved in determining”.

According to Susilo (19:2014) multiple interaction modes and diverse temporal times widened opportunities for student involvement without missing conversation flows. And WhatsApp became the media to be widened the opportunities for students’ involvement in the threatment of experimrntal group. The students’ didn’t had to limit their time just in the calssroom activity but longer time outside the classroom. This why the WhatsApp became the advanced of the peer assessment.

In conclusion, the result of this research showed that both of the classes gained their score because in the quasy-experimental both of them got the material, but the experimental one got the threatment peer assessment through WhatsApp. The experimental got more higher improvement than the control group caused by the threatment peer assessment through WhatsApp.