CHAPTER IV

RESULT OF THE STUDY

In this chapter, the writer presented the research findings, result data analysis and discussion.

A. **The Data Description**

In this section, it described the obtained data of improvement the students'writing descriptive text before and after taught by Facebook and non-Facebook. The presented data consisted of distribution of pre-test score of experimental and control group and also the distribution of post test score of experimental group and control group.

1. The Result of Pretest Score Experimental Group and Control Group

Table 4.1 Pre-Test Score of Control and Experimental Group

Experimental Group		**Control Group**	
Code	**Score**	**Code**	**Score**
E01	66	C01	53
E02	47	C02	47
E03	59	C03	41
E04	47	C04	47
E05	53	C05	53
E06	53	C06	47
E07	47	C07	41

E08	53	C08	38
E09	47	C09	47
E10	41	C10	41
E11	59	C11	59
E12	53	C12	47
E13	47	C13	47
E14	59	C14	53
E15	59	C15	53
E16	59	C16	53
E17	59	C17	47
E18	47	C18	47
E19	66	C19	59
E20	59	C20	53
E21	72	C21	53
E22	72	C22	59
E23	59	C23	66
E24	66	C24	63
E25	59	C25	47
E26	53	C26	47
E27	50	C27	47
E28	53	C28	47
E29	66	C29	66
E30	59	C30	59
E31	59	C31	59
E32	66	C32	66
E33	59	C33	59

E34	47	C34	47
E35	41	C35	41
E36	47	C36	47

a. The Result of Pretest Score of Experimental Group

The pre test was conducted on Monday 24 August 2015 in the X-MIPA 2 room. The students asked to write descriptive text that interested them about the tourism place that should cover the generic structure consisted of identification and description and allocated time was 90 minutes. The students' pre-test score of experiment group were distributed in the following table (see appendix 5) in order analizing the students' background knowledge of descriptive text before the treatment. Then, it was presented using distribution frequency in the following table:

Table 4.2 Frequency Distribution of Pre test Experiment Group

Experiment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	41	2	5,6	5,6	5,6
	47	8	22,2	22,2	27,8
	50	1	2,8	2,8	30,6
	53	6	16,7	16,7	47,2
	59	12	33,3	33,3	80,6
	66	5	13,9	13,9	94,4
	72	2	5,6	5,6	100,0
	Total	36	100,0	100,0	

The distribution of students' score in pretest of experimental group can also be seen in the following figure.

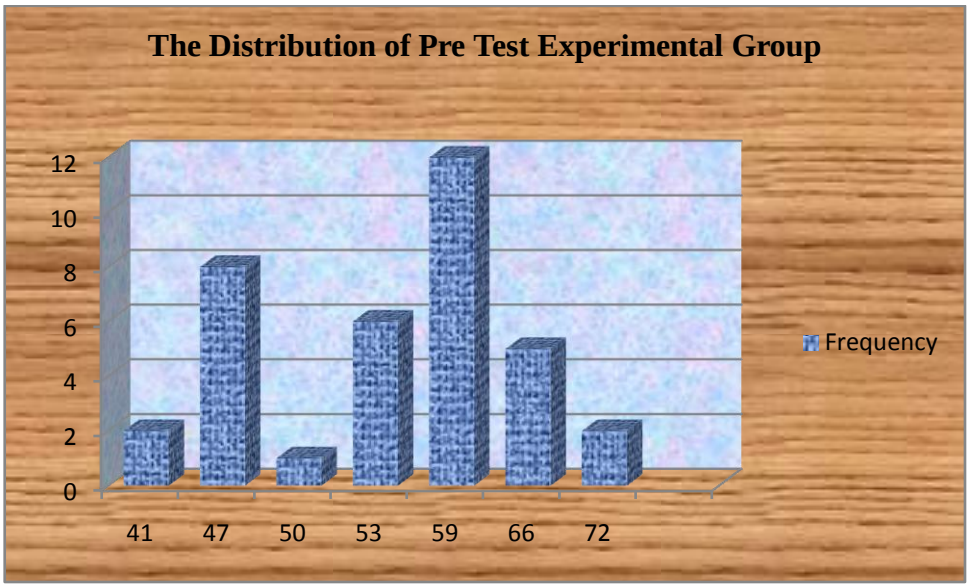

Figure 4.1 The Frequency of Distribution of Pretest Experimental Group

Based on the figure above, it can be seen that the students pretest score of experiment group. There were two students who got score 41. There were eight students who got score 47. There was one student who got score 50. There were six students who got score 53. There were twelve students who got score 59. There were five students who got score 66. And, there were two students who got score 72.

The next step, the writer calculated the scores of mean, standard deviation, and standard error using SPSS 21 program as follows.

Table 4.3 The Calculation of Mean, Median, Mode, Standard Error of Mean and Standard Deviation

Statistics

Experiment

N	Valid	36
	Missing	0
Mean		55,82
Std. Error of Mean		1,359
Median		59,38
Mode		59
Std. Deviation		8,154
Minimum		41
Maximum		72

Based on the calculation above, the higher score pre test of experimental group was 72 and the lowest score was 41. And the result of mean was 55.82, median was 59.38, mode was 59, the standard error of mean was 1.359 and the standard deviation was 8.154.

a. The Result of Pre test Score of Control Group

The pre test was conducted on Wednesday 12 August 2015 in the X-MIPA 1 room. The students asked to write descriptive text that interested them about the tourism place that should cover the generic structure consisted of identification and description and allocated time was 90 minutes. The students' pre-test score of control group were distributed in the following table (see in appendix 5) in order analizing the students' background knowledge. Then, it was presented using frequency distribution in the following table:

Table 4.4 Distribution Frequency of Pre test Control Group

Control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	38	1	2,8	2,8	2,8
	41	4	11,1	11,1	13,9
	47	14	38,9	38,9	52,8
	53	7	19,4	19,4	72,2
	59	6	16,7	16,7	88,9
	63	1	2,8	2,8	91,7
	66	3	8,3	8,3	100,0
	Total	36	100,0	100,0	

The distribution of students' score in pretest of control group can also be seen in the following figure.

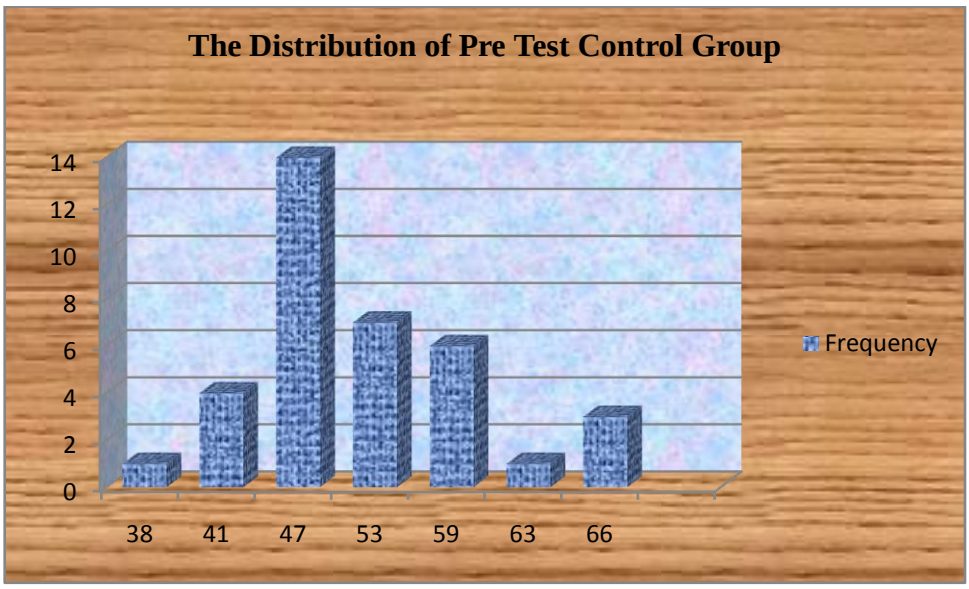

Figure 4.2 The Frequency of Distribution of Pretest Control Group

Based on the figure above, it can be seen that the students pretest score of control group. There was one student who got score 38. There were four students who got score 41. There were fourteen students who got score 47. There were seven students who got score 53. There were six students who got score 59. There was one student who got score 63. And, there were three students who got score 66.

The next step, the writer calculated the scores of mean, standard deviation, and standard error using SPSS 21 program as follows:

Table 4.5 The Calculation of Mean, Standard Error of Mean, Standard Deviation

Statistics

Control

N	Valid	36
	Missing	0
Mean		51,22
Std. Error of Mean		1,284
Median		46,88
Mode		47
Std. Deviation		7,701
Minimum		38
Maximum		66

Based on the calculation above, the higher score pre test of control group was 66 and the lowest score was 38. And the result of mean was 51.22, median was 46.88, mode was 47, the standard error of mean was 1.284 and the standard deviation was 7.701.

2. **The Result of Post Test Score Experimental Group and Control Group**

Table 4.6 Post Test Score of Control and Experimental Group

Experimental Group		Control Group	
Code	**Score**	**Code**	**Score**
E01	72	C01	59
E02	59	C02	59
E03	72	C03	53
E04	53	C04	56
E05	66	C05	63
E06	59	C06	63
E07	56	C07	56
E08	66	C08	53
E09	53	C09	59
E10	53	C10	53
E11	78	C11	63
E12	72	C12	56
E13	59	C13	59
E14	78	C14	63
E15	72	C15	59
E16	84	C16	59
E17	66	C17	53
E18	59	C18	53
E19	78	C19	72
E20	72	C20	59
E21	84	C21	66

E22	84	C22	66
E23	78	C23	72
E24	84	C24	66
E25	72	C25	53
E26	66	C26	56
E27	66	C27	56
E28	66	C28	59
E29	84	C29	72
E30	78	C30	66
E31	72	C31	66
E32	84	C32	72
E33	72	C33	66
E34	66	C34	59
E35	53	C35	56
E36	59	C36	56

a. The Result of Post test Score of Experimental Group

The post test was conducted on Friday 25 September 2015 in the X-MIPA 2 room. The students asked to write descriptive text that interested them about the tourism place that should cover the generic structure consisted of identification and description, allocated time was 90 minutes and should post their text on Facebooks' group.The students' post test score of experiment class were distributed in the following table (see in appendix 5) in order analizing the students' wriitng descriptive

text after the treatment. Then, it was presented using frequency distribution in the following table:

Table 4.7 Frequency Distribution of Post Test Experimental Group

Experiment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	53	4	11,1	11,1	11,1
	56	1	2,8	2,8	13,9
	59	5	13,9	13,9	27,8
	66	7	19,4	19,4	47,2
	72	8	22,2	22,2	69,4
	78	5	13,9	13,9	83,3
	84	6	16,7	16,7	100,0
	Total	36	100,0	100,0	

The distribution of students' score in pretest of Experimental group can also be seen in the following figure.

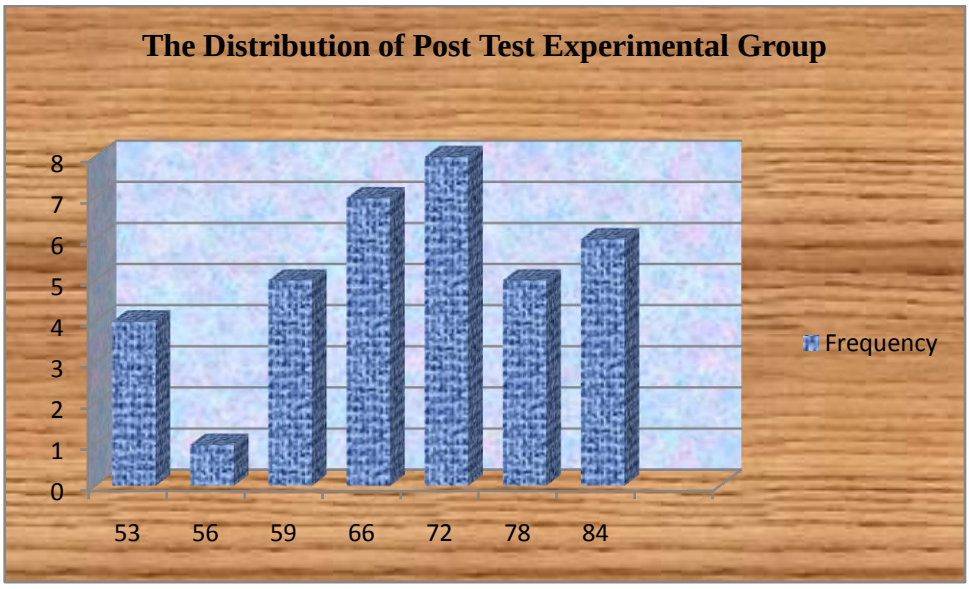

Figure 4.3 The Frequency of Distribution of Post test Experimental Group

Based on the figure above, it can be seen that the students post test experimental group. There were four students who got score 53. There was one student who got score 56. There were five students who got score 59 . There were seven students who got score 66. There were eight students who got score 72. There were five students who got score 78. And, there were six students who got score 84.

The next step, the writer calculated the scores of mean, standard deviation, and standard error using SPSS 21 program as follow.

Table 4.8 The Calculation of Mean, Standard Error of Mean, Standard Deviation

Statistics

Experiment

N	Valid	36
	Missing	0
Mean		69,36
Std. Error of Mean		1,693
Median		71,88
Mode		72
Std. Deviation		10,156
Minimum		53
Maximum		84

Based on the calculation above, the higher score post test of experimental group was 84 and the lowest score was 53. And the result of mean was 69.36, median was 71.88, mode was 72, the standard error of mean was 1.693 and the standard deviation was 10.156.

b. The Result of Post test Score of Control Group

The post test was conducted on Thursday 03 September 2015 in the X-MIPA 1 room. The students asked to write descriptive text that interested them about the tourism place that should cover the generic structure consisted of identification and description, allocated time was 90 minutes The students' post test score of control group were distributed in the following table (see in appendix 5) in order analizing the knowledge of descriptive text. Then, it was presented using frequency distribution in the following table:

Table 4.9 Distribution Frequency of Post test Control Group

Control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	53	6	16,7	16,7	16,7
	56	7	19,4	19,4	36,1
	59	9	25,0	25,0	61,1
	63	4	11,1	11,1	72,2
	66	6	16,7	16,7	88,9
	72	4	11,1	11,1	100,0
	Total	36	100,0	100,0	

The distribution of students' score in post test of control group could also be seen in the following figure.

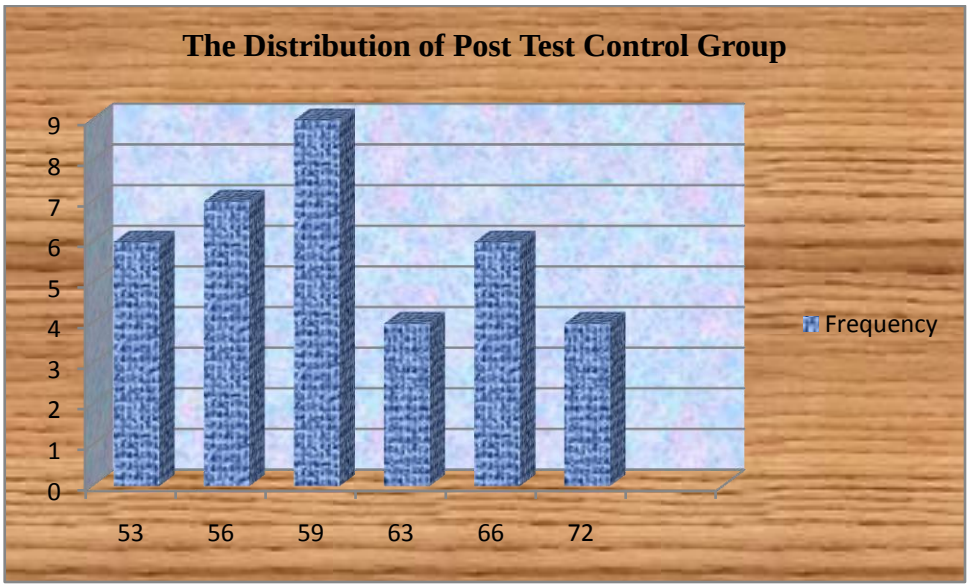

Figure 4.4 The Frequency of Distribution of Post test Control Group

Based on the figure above, it can be seen that the students post test control group. There were six students who got score 53. There were seven students who got score 56. There were nine students who got score 59. There were four students who got score 63. There were six students who got score 66. And there were four students who got score 72.

The next step, the writer calculated the scores of mean, standard deviation, and standard error using SPSS 21 program as follows:

Table 4.10 The Manual Calculation of Mean, Standard Error of Mean, Standard Deviation

Statistics

Control

N	Valid	36
	Missing	0

Mean	60,50
Std. Error of Mean	,958
Median	59,38
Mode	59
Std. Deviation	5,745
Minimum	53
Maximum	72

Based on the calculation above, the higher score pre test of control group was 72 and the lowest score was 53. And the result of mean was 60.50, median was 59.38, mode was 59, the standard error og mean was 0.958 and the standard deviation was 5.745.

3. The Comparison Result of Pre-test and Post-test of Experimental and Control Group

Table 4.11 The Comparison Result of Pre-test and Post-test of Experimental and Control Group

Experimental					Control			
No	**Code**	**Pre Test**	**Post Test**	**Improvement**	**Code**	**Pre Test**	**Post Test**	**Improvement**
1	E01	66	72	6	C01	53	59	6
2	E02	47	59	12	C02	47	59	12
3	E03	59	72	13	C03	41	53	12
4	E04	47	53	6	C04	47	56	9
5	E05	53	66	13	C05	53	63	10
6	E06	53	59	6	C06	47	63	16
7	E07	47	56	9	C07	41	56	15
8	E08	53	66	13	C08	38	53	15
9	E09	47	53	6	C09	47	59	12
10	E10	41	53	12	C10	41	53	12

11	E11	59	78	19	C11	59	63	4
12	E12	53	72	19	C12	47	56	9
13	E13	47	59	12	C13	47	59	12
14	E14	59	78	19	C14	53	63	10
15	E15	59	72	13	C15	53	59	6
16	E16	59	84	25	C16	53	59	6
17	E17	59	66	7	C17	47	53	6
18	E18	47	59	12	C18	47	53	6
19	E19	66	78	12	C19	59	72	13
20	E20	59	72	13	C20	53	59	6
21	E21	72	84	12	C21	53	66	13
22	E22	72	84	12	C22	59	66	7
23	E23	59	78	19	C23	66	72	6
24	E24	66	84	18	C24	63	66	3
25	E25	59	72	13	C25	47	53	6
26	E26	53	66	13	C26	47	56	9
27	E27	50	66	16	C27	47	56	9
28	E28	53	66	13	C28	47	59	12
29	E29	66	84	18	C29	66	72	6
30	E30	59	78	19	C30	59	66	7
31	E31	59	72	13	C31	59	66	7
32	E32	66	84	18	C32	66	72	6
33	E33	59	72	13	C33	59	66	7
34	E34	47	66	19	C34	47	59	12
35	E35	41	53	12	C35	41	56	15
36	E36	47	59	12	C36	47	56	9
	Total	**2008**	**2495**	**487**	**Total**	**1846**	**2177**	**331**
	Mean	**55,8**	**69,36**		**Mean**	**51,22**	**60,50**	
	Highest	**72**	**84**		**Highest**	**66**	**72**	
	Lowest	**41**	**53**		**Lowest**	**38**	**53**	

4. Testing the Normality and Homogeinity

a. Normality Test

The writer used SPSS 21 to measure the normality of the data.

1) Testing Normality of Post Test Experimental and Control Group

Table 4.13 Testing Normality of Post Test Experimental and Control Group

One-Sample Kolmogorov-Smirnov Test

		Experiment	Control
N		36	36
Normal Parameters[a,b]	Mean	69,36	60,50
	Std. Deviation	10,156	5,745
Most Extreme Differences	Absolute	,126	,189
	Positive	,116	,189
	Negative	-,126	-,100
Kolmogorov-Smirnov Z		,754	1,134
Asymp. Sig. (2-tailed)		,620	,153

a. Test distribution is Normal.

b. Calculated from data.

The criteria of the normality test of post test if the value of (probability value/critical value) was higher than or equal to the level of significance alpha defined, it means that the distribution was normal. Based on the calculation used SPSS 21.00 program, asymptotic significance normality of control group was 0.153 and experiment group 0.620. Then the normality both of class was consulted with table of Kolmogorov- Smirnov with the level of significance 5% (α=0.05). because asymptotic significance of control 0.153 > 0.05, and asymptotic significance of experiment 0.620>0.05.

it could be concluded that the data was normal distribution. It meant that the students' pre test score of experimental and control group had normal distribution.

b. Homogeinity Test

2) Testing Homogeinity of Post Test Experimental and Control Group

Table 4.15 Testing Homogeinity of Post-Test Experimental and Control Group

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
,890	5	30	,500

The criteria of the homogeneity test post test was if the value of (probability value/critical value) was higher than or equal to the level of significance alpha defined (r = a), it means that, the distribution was homogeneity. Based on the calculation using SPSS 21.0 above, the value of (probably value/critical value) from post test of the experimental and control group on Homogeneity of Variances in sig column is known that p-value was 0,500. The data in this study fulfilled homogeneity since the p value is higher 0,500> 0.05.

B. Result Data Analysis

1. Testing Hyphothesis Using Manual Calculation

To test the hypothesis of the study, the writer used t-test statistical calculation. Firstly, the writer calculated the standard deviation and the error

of X_1 and X_2 at the previous data persentation. In could be seen on this following table:

Table 4.16

The Standard Deviation and Standard Error of X_1 and X_2

Variable	The Standard Deviation	The Standard Error of Mean
X_1	10.156	1.693
X_2	5.754	0.958

X_1 = Experimental Group

X_2 = Control Group

The table showed the result of the standard deviation calculation of X_1 was 10.156 and the result of the standard error mean calculation was 1.693. The result of the standard deviation calculation of X_2 was 5.754 and the result of the standard error mean calculation was 0.958.

The next step, the writer calculated the standard error of the difference mean between X_1 and X_2 as follows:

Standard error of mean of score difference between Variable I and Variable II

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

$$SE_{M1} - SE_{M2} = \sqrt{(1.693)^2 + (0.958)^2}$$

$$SE_{M1} - SE_{M2} = \sqrt{2.866249 + 0.917764}$$

$SE_{M1} - SE_{M2} = \sqrt{3.784013}$

$SE_{M1} - SE_{M2} = 1.9452539679949$

$SE_{M1} - SE_{M2} =$ **1.946**

The calculation above showed the standard error of the differences mean between X_1 and X_2 was 1.946. Then, it was inserted to the t_{test} formula to get the value of t test as follows:

$$t_o = \frac{M1 - M2}{SEm1 - SEm2}$$

$$t_o = \frac{69.36 - 60.50}{1.946}$$

$$t_o = \frac{8.86}{1.946}$$

$t_o = 4.55292909$

$t_o =$ **4.553**

Which the criteria:

If t-test ≥ t-table, Ha is accepted and Ho is rejected

If t-test < t-table, Ha is rejected and Ho is accepted

Then, the writer interpreted the result of t-test; previously, the writer accounted the degree of freedom (df) with the formula:

Df $= (N_1+N_2) -2$

$= 36+36 - 2 =$ **70**

The writer chose the significant levels at 5%, it means the significant level of refusal of null hypothesis at 5%. The writer decided the significance level at 5% due to the hypothesis typed stated on non-directional (two-tailed test). It meant that the hypothesis can't direct the prediction of alternative hypothesis. Alternative hypothesis symbolized by "1". This symbol could direct the answer of hypothesis, "1" can be (>) or (<). The answer of hypothesis could not be predicted whether on more than or less than.

The calculation above showed the result of t-test calculation as in the table follows:

Table 4.17

The Result of T-Test Using Manual Calculation

Variable	**T test**	**T table**		**Df/db**
		5 %	**1 %**	
X_1-X_2	4.553	1.994	2.648	70

Where:

X_1 = Experimental Group

X_2 = Control Group

T test = The Calculated Value

T table = The Distribution of t Value

Df/db = Degree of Freedom

Based on the result of hypothesis test calculation, it was found that the value of $t_{observed}$ was greater than the value of t_{able} at 1% and 5% significance level or 1.994< 4.553 >2.648. It means H_a was accepted and H_o was rejected. It meant H_a was accepted and H_o was rejected. It could be interpreted based on the result of calculation that H_a stating that Facebook was effective for Teaching Writing Descriptive Text of the tentth grade students at SMAN 2 Pahandut Palangka Raya was accepted and H_o stating that Facebook was not effective for Teaching Writing Descriptive Text of the tenth grade students at SMAN 2 Pahandut Palangka Raya was rejected. It meant that teaching writing with Facebook was effective for Teaching Writing Descriptive Text of the tenth graders of SMAN 2 Pahandut Palangka Raya gave significant effect at 5% and 1% significance level.

2. Testing Hypothesis Using SPSS 21.0 Program

The writer also applied SPSS 21.0 program to calculate t test in testing hypothesis of the study. The result of the t test using SPSS 21.0 was used to support the manual calculation of the t test. The result of the test using SPSS 21.0 program could be seen as follows:

Table 4.18

Mean, Standard Deviation and Standard Error of Experiment Group and Control Group using SPSS 21.0 Program

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	Experiment	36	69,36	10,156	1,693
	Control	36	60,50	5,745	,958

The table showed the result of mean calculation of experimental group was 69.36, standard deviation calculation was 10.156, and standard error of mean calculation was 1. 693. The result of mean calculation of control group was 60.50, standard deviation calculation was 5.745, and standard error of mean was 0.958.

Table 4.19 The Calculation of T – Test Using SPSS 21.0

Independent Samples 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
Score	Equal variances assumed	14,177	,000	4,553	70	,000	8,854	1,945	4,976	12,733
	Equal variances not assumed			4,553	55,322	,000	8,854	1,945	4,957	12,751

The table showed the result of t – test calculation using SPSS 21.0 program. To know the variances score of data, the formula could be seen as follows:

If $\alpha = 0.05 <$ Sig, Ho accepted and Ha rejected

If $\alpha = 0.05 >$ Sig, Ha accepetd and Ho rejected

Since the result of post test between experiemental and control group had difference score of variance, it found that $\alpha = 0.05$ was higher than Sig (2-tailed) or (0.05>0.00), so that Ha was accpeted and Ho was rejected . The result of t_{test} was 4.553, mean difference between experimental and control group was 8.854 and the standard error difference between experimental and control group was 1.945.

To examine the truth or the false of null hypothesis stating that the there is no effect of Facebook in writing descriptive text at tenth graders of SMAN 2 Pahandut Palangka Raya. The result of t – test was interpreted on the result of degree of freedom to get the t_{table}. The result of degree of freedom (df) was 70. The following table was the result of $t_{observed}$ and t_{table} from 70 df at 5% and 1% significance level.

Table 4.20

The Result of T-Test Using SPSS 21.0 Program

t_{test}	t_{table}		Df
	5 % (0,05)	1 % (0,01)	
4.553	1.994	2.648	70

The interpretation of the result of t-test using SPSS 21.0 program, it was found the t observe was greater than the t table at 1% and 5% significance level or 1.994< 4.553>2.648. It means that H_a was accepted and $H_o$was rejected. It could be interpreted based on the result of calculation that H_a stating that Facebook was effective for Teaching Writing Descriptive Text of the tentth grade students at SMAN 2 Pahandut Palangka Raya was accepted and H_o stating that Facebook was not effective for Teaching Writing Descriptive Text of the tenth grade students at SMAN 2 Pahandut Palangka Raya was rejected. It meant that teaching writing with Facebook was effective for Teaching Writing Descriptive Text of the tenth graders at SMAN 2 Pahandut Palangka Raya gave significant effect at 5% and 1% significance level.

C. Discussion

The result of analysis showed that there was significant effect of Facebook in writing descriptive text at tenth graders of SMAN 2 Pahandut Palangka Raya. It can be seen from the means score between pre-test and post test. The mean score of post test reached higher score than the mean score of Pre-test (X= 69.36 < Y=60.50). It indicated that the students' score increased after conducting treatment. In other words, the students writing descriptive text taught by Facebook have better than those taught by non-Facebook at the tenth graders of SMAN 2 Pahandut Palangka Raya.

In addition, after the data was calculated using the t_{test} formula using SPSS 21.00 program showed that the $t_{observed}$ was 4.553. In addition, After the students have been taught by using Facebook, the writing score were higher

than before implementing it. This finding indicated that Facebook was effective and supported the previous research done by Ria Ristibantari and Meyla Arih Yustari that also stated teaching writing by using Facebook was effective.

In teaching learning process, taught writing descriptive text by using Facebook was a tool used by the writer to teach the students. It could be seen from the score of students how the used of Facebook gave positive effects for students writing descriptive text. It meant that it has important role in teaching learning process. It was answered the problem of the study which "Is there any significant effect of Facebook in writing descriptive text at tenth graders of SMAN 2 Pahandut Palangka Raya?".

Facebook as means for language learning, effectively enhanced the writing descriptive text at tenth graders of SMAN 2 Pahandut Palangka Raya. The students writing descriptive text was enhanced after the treatment when they were given opportunities to use Facebook in the learning process. They wrote better descriptive text using more meaningful contents within a well-organized text in the post test.

The results supported theory by Dare and Gar in Chaper II page 14, stated that Facebook helped students increase own language learning in a fun and motivating way.[54] The students gave their attention to the material because the writer used different media than usual. Using Facebook as a media in writing text actively encourages collaborrative environment, increases

[54]Louis Dare and Coleg Sir Gar, P 6

motivation and the students participation. They could be update the writing assignments on Faceboook and their friends commented on their writing.

Next results supported theory by Terantino and Graf in Chapter II page 15, stated that integrating Facebook in foreign language course had several perceived that using Facebook seems to have a significant impact on language learning. Such as the nature of the students-to-students and students-to-instructor instructions is more multi-dimensional than traditional writing assignment.[55] In line with it, the writer gave the students the assignment of descriptive text and asked them to post their writing on Facebook not on paper so that the students had antusiasm on produce the text.

The result of t-test using SPSS 21.0 program, it was found the t test was greater than the t table at 1% and 5% significance level or 1.994< 4.553>2.648. It means that H_a was accepted and $H_o$was rejected. It could be interpreted based on the result of calculation that H_a stating that Facebook was effective for Teaching Writing Descriptive Text of the tenth graders of SMAN 2 Pahandut Palangka Raya was accepted and H_o stating that Facebook was not effective for teaching writing descriptive ext of the tenth graders of SMAN 2 Pahandut Palangka Raya was rejected. It meant that teaching writing with Facebook was effective for teaching writing descriptive text of the tenth graders of SMAN 2 Pahandut Palangka Raya.

[55] J Terantino, K Graf, P 5