

CHAPTER IV

DATA PRESENTATION AND RESEARCH FINDINGS

This chapter discussed the data which had been collected from the research in the field of study. this case consisted of description of the data, normality and homogeneity test using Kolmogorov-Smirnov in SPSS 18.0 program and discussion.

A. Presentation of the Data

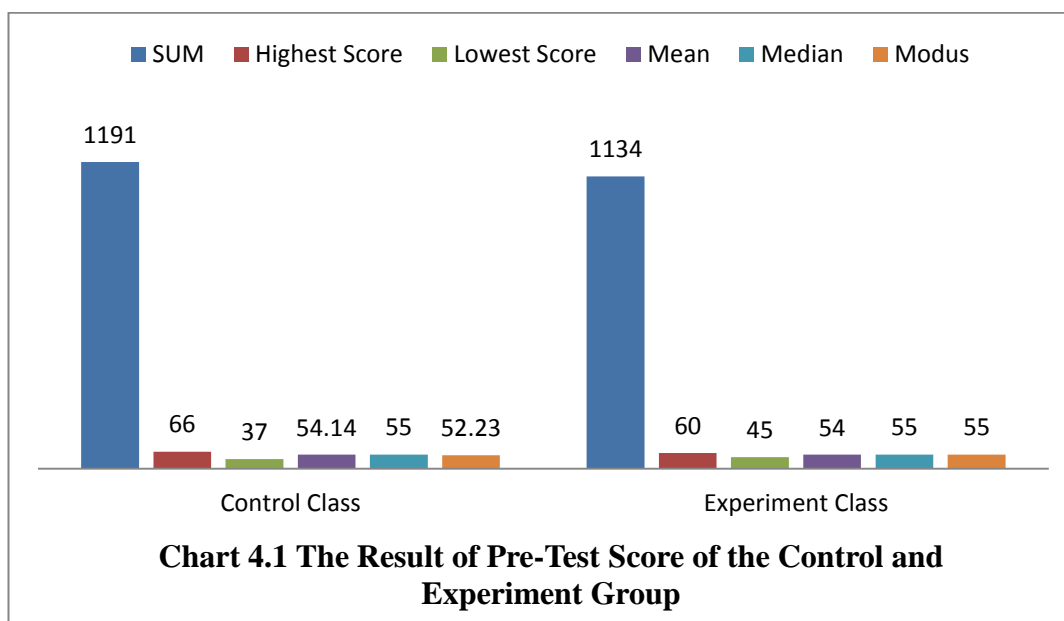
1. The Result of Pre-Test Score of the Control and Experiment Group

The Pre-Test was conducted to the control group in X-5 on April 23rd, 2016, at 08.00-09.30 am and Pre-test was conducted to the Experiment Group in X-3 at 09.50-11.30 am. The students wrote the text on paper and chose the topic to develop their idea in a text. The Pre-test scores of the classes were presented in Table 4.1.

Table 4.1 The Pre-Test Score of Control Group

No	Control Class		Experiment Group	
	Students Code	Pre Test	Students Code	Pre Test
1	C1	57	E1	58
2	C2	49	E2	54
3	C3	54	E3	57
4	C4	62	E4	60
5	C5	42	E5	55
6	C6	62	E6	53
7	C7	50	E7	55
8	C8	49	E8	48
9	C9	50	E9	51
10	C10	55	E10	52
11	C11	37	E11	45
12	C12	51	E12	46
13	C13	48	E13	50

14	C14	58	E14	49
15	C15	55	E15	58
16	C16	63	E16	60
17	C17	55	E17	59
18	C18	59	E18	57
19	C19	66	E19	55
20	C20	55	E20	53
21	C21	61	E21	59
22	C22	53	-	-
SUM		1191	-	1134
Highest Score		66	-	60
Lowest Score		37	-	45
Mean		54.14	-	54
Median		55	-	55
Modus		52.23	-	55
Standard Deviation		6.958	-	4.539



Based on the result of research in class X-5 as control group, the highest pre-test score of student control class was 66 and the lowest score of control class was 37 with the sum of the data was 1191, the mean was 54.14, the median was 55 and modus was 52.23. Then, based on the pre-test in X-3 as Experiment Group, the

highest score 60 and the lowest score was 45 with the sum 1134, the mean was 54, the median was 55 and modus 55.

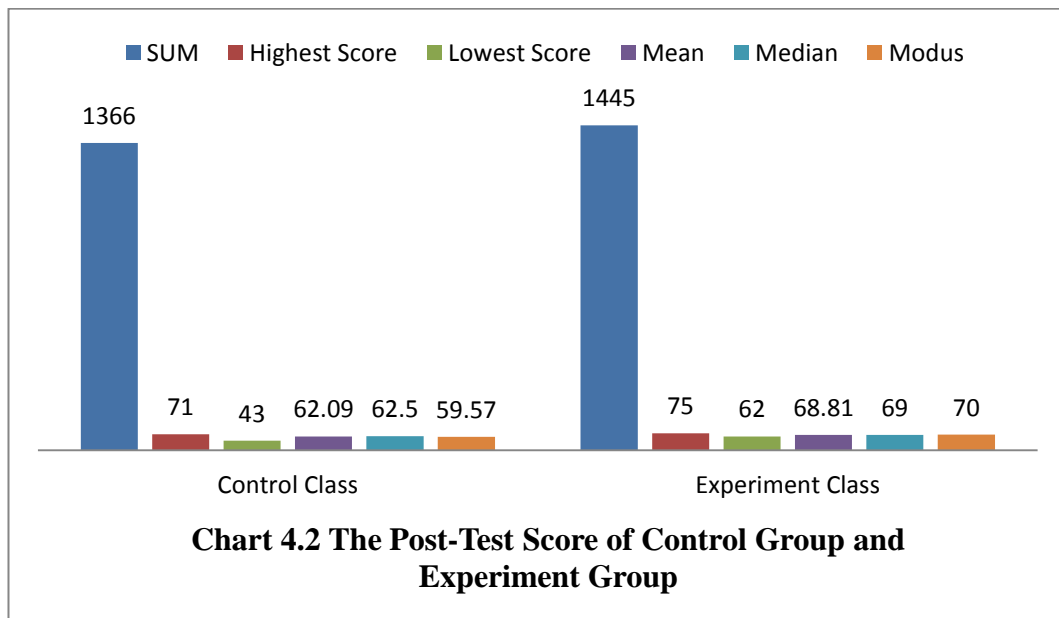
2. The Result of Post-Test Score of the Control Group and Experiment Group

The Post-Test was conducted to the control group in X-5 on May 21st, 2016, at 08.00-09.30 am and The Post-Test was conducted to the control group in X-5 on May 21st, 2016, at 09.30-11.30 am. The students wrote the text on paper and chose the topic to develop their idea in a text. The Post-test scores of the classes were presented in Table 4.1.

Table 4.2 The Post-Test Score of Control Group and Experiment Group

No	Control Group		Experiment Group	
	Students Code	Post Test	Students Code	Post Test
1	C1	68	E1	75
2	C2	64	E2	62
3	C3	69	E3	67
4	C4	70	E4	70
5	C5	59	E5	71
6	C6	70	E6	70
7	C7	64	E7	68
8	C8	60	E8	69
9	C9	62	E9	72
10	C10	64	E10	74
11	C11	43	E11	65
12	C12	62	E12	67
13	C13	55	E13	70
14	C14	60	E14	71
15	C15	50	E15	68
16	C16	60	E16	67
17	C17	55	E17	63
18	C18	67	E18	69
19	C19	69	E19	70

20	C20	61	E20	70
21	C21	71	E21	67
22	C22	63	-	-
SUM		1366	-	1445
Highest Score		71	-	75
Lowest Score		43	-	62
Mean		62.09	-	68.81
Median		62.50	-	69
Modus		59.57	-	70
Standard Deviation		6.921	-	3.172



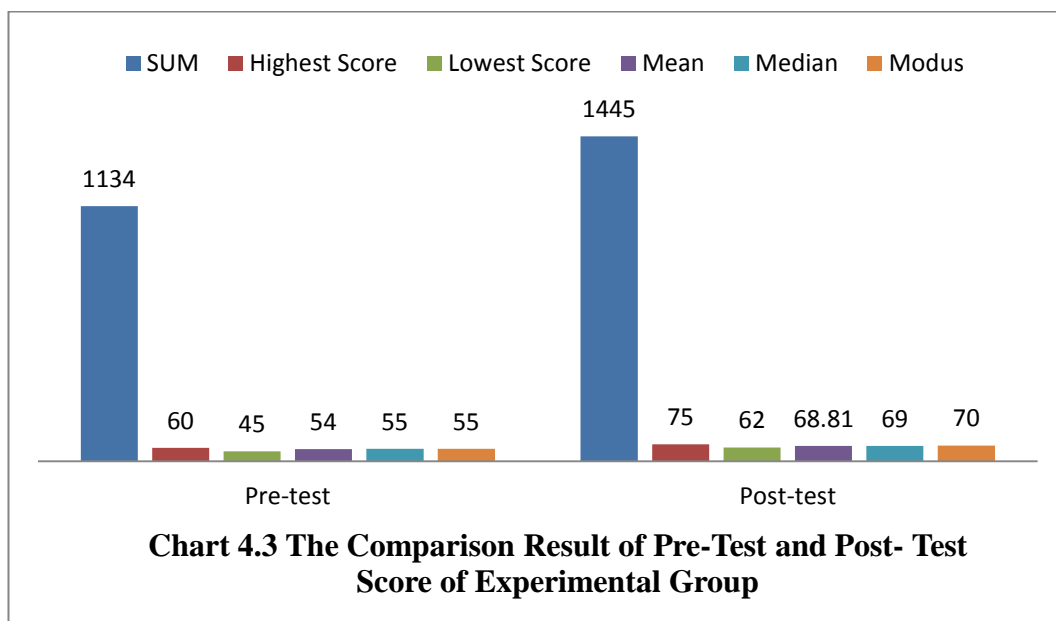
Based on the result of research in class X-5 as Control group, the highest post- test score of student control group was 71 and the lowest score of control class was 43 with the sum of the data was 1366 mean was 62.09 and modus was 59.57. Then, based on the result of research in class X-3 as Experiment group, the highest post- test score of student experiment group was 75 and the lowest score of control class was 62 with the sum of the data was 1445 mean was 68.81 and modus were 70.

3. Comparison Result of Pre-Test and Post-Test Score of Experiment Group

The comparison between students' pre-test and post-test after doing the experiment can be seen in the following Table 4.5.

Table 4.3 The Comparison Result of Pre-Test and Post- Test Score of Experimental Group

No	Experiment Group			
	Students Code	Pre Test	Post Test	Improvement
1.	E1	58	75	17
2.	E2	54	62	8
3.	E3	57	67	10
4.	E4	60	70	10
5.	E5	55	71	16
6.	E6	53	70	17
7.	E7	55	68	13
8.	E8	48	69	21
9.	E9	51	72	21
10.	E10	52	74	22
11.	E11	45	65	20
12.	E12	46	67	21
13.	E13	50	70	20
14.	E14	49	71	22
15.	E15	58	68	20
16.	E16	60	67	7
17.	E17	59	63	4
18.	E18	57	69	12
19.	E19	55	70	15
20.	E20	53	70	17
21.	E21	59	67	8
SUM		1134	1445	-
Highest Score		60	75	-
Lowest Score		45	62	-
Mean		54	68.81	-
Median		55	69	-
Modus		55	70	-
Standard Deviation		4.539	3.172	-



Based on the data above, the mean of pre-test were 54 and 68.81 in post-test. It could be concluded that the students writing ability of experiment class was increased from pre-test to post-test.

4. Testing the Normality and Homogeneity

a. Normality Test

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.

This study used SPSS 18 to measure the normality of the data.

1) Testing Normality of Post Test Experimental and Control Group

Table 4.4 Testing Normality of Post Test Experimental and Control Group

Kolmogorov-Smirnov Test		
		VAR000 02
N		43
Normal Parameters ^b	Mean	67.42
	Std. Deviation	8.134
Most Extreme Differences	Absolute	.112
	Positive	.077
	Negative	-.112
Kolmogorov-Smirnov Z		.734
Asymp. Sig. (2-tailed)		.654

a. Test distribution is Normal.

b. Calculated from data.

Based on the calculation used SPSS 18.00 program, asymptotic significance normality of experiment group 0.654. Then the normality both of class was consulted with a table of Kolmogorov- Smirnov with the level of significance 5% ($\alpha=0.05$). because of the asymptotic significance of significance of experiment $0.654 > 0.05$. it could be concluded that the data was in normal distribution. It meant that the students' post-test score of the experimental group had a normal distribution.

b. Homogeneity Test

2) Testing Homogeneity of Post Test Experimental and Control Group

The criteria of the homogeneity test of post-test were 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.

Table 4.5 Testing Homogeneity of Post-Test Experimental and Control Group

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
3.513	3	9	.620

Based on the calculation using SPSS 18 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 0.620. The data in this study fulfilled homogeneity since the p-value is higher $0.500 > 0.05$.

1. Testing Hypothesis 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 presentation. In could be seen on this following table:

Table 4.16
The Standard Deviation and Standard Error of X₁ and X₂

Variable	The Standard Deviation	The Standard Error of Mean
X ₁	3.172	1.992
X ₂	6.921	2.014

X₁ = Experimental Group

X₂ = Control Group

The table showed the result of the standard deviation calculation of X₁ was 3.172 and the result of the standard error mean calculation was 1.992. The result of the standard deviation calculation of X₂ was 6.921 and the result of the standard error mean calculation was 2.014.

The next step, the writer calculated the standard error of the difference mean between X₁ and X₂ as follows:

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

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

$$SE_{M1} - SE_{M2} = \sqrt{(1.992)^2 + (2.014)^2}$$

$$SE_{M1} - SE_{M2} = \sqrt{3.968064 + 4.056196}$$

$$SE_{M1} - SE_{M2} = \sqrt{8.02426}$$

$$SE_{M1} - SE_{M2} = 4.832712$$

$$SE_{M1} - SE_{M2} = \mathbf{4.8}$$

The calculation above showed the standard error of the differences mean between X_1 and X_2 was 2.8. Then, it was inserted to the t_{test} formula to get the value of t test as follows:

$$t_o = \frac{M1 - M2}{SE_{M1} - SE_{M2}}$$

$$t_o = \frac{68.81 - 62.09}{4.832}$$

$$t_o = \frac{5.91}{4.832}$$

$$t_o = 4.08686$$

$$t_o = \mathbf{4.086}$$

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

Table 4.6 the Standard Deviation of Experiment and Control Group

Group	Standard Deviation
Experimental Group	3.172
Control Group	6.921

$$\begin{aligned}
 t_{\text{observed}} &= \frac{M_1 - M_2}{SE_{M_1 - M_2}} \\
 &= \frac{6.921 - 3.172}{2.014 - 1.992} \\
 &= \frac{3.749}{0.022} = 170.40
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{df} &= (N_1 + N_2 - 2) \\
 &= 21 + 21 - 2 = 40
 \end{aligned}$$

1. Testing Hypothesis Using SPSS 18.0 Program

The writer also applied SPSS 18.0 program to calculate t-test in the testing hypothesis of the study. The result of the t-test using SPSS 18.0 was used to support the manual calculation of the t-test. The result of the test using SPSS 18.0 program could be seen as follows :

Table 4.8 The Calculation of T – Test Using SPSS 18.0

		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	1.802	0.00	4.769	41	0.00	9.606	2.014	13.673	5.538

		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	1.802	0.00	4.769	41	0.00	9.606	2.014	13.673	5.538	
	Equal variances not assumed			4.821	35.071	0.00	9.606	1.992	13.650	5.561	

The table showed the result of t – test calculation using SPSS 18.0 program.

To know the variances score of data, the formula could be seen as follows:

If $\alpha = 0.05 < \text{Sig } 0.00$, Ho accepted and Ha rejected

If $\alpha = 0.05 > \text{Sig } 0.00$, Ha accepted and Ho rejected

Since the result of post-test between experimental and control group had difference score of variance, it found that $\alpha = 0.05$ was higher than Sig (0.00). Therefore, Ha stating that the use of guided writing using facebook gives effect to students' ability in writing recount text at X-3 graders of SMA Muhammadiyah 1 Palangka Raya was accepted. Ho stating that The use of guided writing using facebook does not give effect to students' ability in writing recount text at the X-3 graders of SMA Muhammadiyah 1 Palangka Raya was rejected.

B. Interpretation

The interpretation of the result of t-test using SPSS 18.0 program. It could be interpreted based on the result of a calculation that H_a stating that the use of guided writing using facebook gives effect to students' ability in writing recount text at X-3 graders of SMA Muhammadiyah 1 Palangka Raya was accepted. H_o stating that The use of guided writing using facebook does not give effect to students' ability in writing recount text at the X-3 graders of SMA Muhammadiyah 1 Palangka Raya was rejected. It meant that teaching writing recount text with guided writing using facebook at X-3 grades of SMA Muhammadiyah 1 Palangka Raya gave significant effect at 5% and 1% significance level.

C. Discussion

The result of the analysis showed that there was a significant effect of guided writing strategy using Facebook in writing recount text at tenth graders of SMA Muhammadiyah 1 Palangka Raya. It can be seen from the means score between pre-test and post-test. The mean score of post test reached a higher score than the mean score of Pre-test ($X= 68.81 < Y=54$). It indicated that the students' score increased after conducting treatment. In other words, the students writing using guided strategy on recount text using Facebook has better than those taught by non-Facebook at the tenth graders of SMA Muhammadiyah 1 Palangka Raya.

In addition, after the data was calculated using the t_{test} formula using SPSS 18.00 program showed that the t_{observed} was 4.769. In addition, After the students have guided writing strategy by using Facebook, the writing score was higher than before implementing it. This finding indicated that Guided writing strategy using Facebook was effective and supported the previous research done by Dafi Kusnita, Vayye Langen Dyan and Yosef Dwi Anggara that also stated guided writing strategy using Facebook was effective.⁷⁵

In teaching learning process, taught writing recount text by guided writing strategy 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 recount text. It meant that it has an important role in teaching learning process. It was answered the problem of the study which “Is there any significant effect of guided writing strategy using facebook toward the students in writing ability of tenth grade at SMA Muhammadiyah 1 Palangka Raya?

Facebook as means for language learning, effectively enhanced the writing recount text at tenth graders of SMA Muhammadiyah 1 Palangka Raya. The students writing recount text was enhanced after the treatment when they were given opportunities to use guided writing strategy on Facebook in the learning process. They wrote better recount text using more meaningful contents within a well-organized text in the post-test.

⁷⁵ Vayye Langen Dyan, *Improving Writing Skill Through Guided Writing (A classroom Action Research at The Third Year Students of SMU Negeri I Karanganyar in The Academic Year of 2009/2010)*. Unpublished Thesis, Surakarta : Universitas Sebelas Maret Surakarta : 2010.