

CHAPTER IV

RESULT OF THE STUDY

This chapter discusses the data which had been collected from the research in the field of study. The data were the result of experiment and control class, the result of post-test experiment and control class, and the result of data analysis.

A. Description of the Data

1. The result of Pre-Test score of the Experiment Groups and Control Group

The Pre-Test was conducted to the first experiment group (Self-Correct) in XI IPS 3 room on august 11th, 2014, at 07.45-09.15 am., and followed by second experiment group (Self-Repair) in XI IPS 2 room at 10.15-11.45 am. Then the control group was given Pre-Test in XI IPS 1 room on august 12th, 2014, at 10.15-11.45 am. The Pre-test scores of the groups were presented in Table 4.1.

Table 4.1. Students' Final Score of Pre Test

No	Experiment Group (Self Correct) XI IPS 3		Experiment Group (Self Repair) XI IPS 2		Control Group XI IPS1	
	Subject	Score	Subject	Score	Subject	Score
1	SC1	55.56	SR1	58.33	C1	61.11
2	SC2	55.56	SR2	50.00	C2	55.56
3	SC3	52.78	SR3	50.00	C3	58.33
4	SC4	58.33	SR4	58.33	C4	61.11
5	SC5	55.56	SR5	55.56	C5	61.11
6	SC6	55.56	SR6	52.78	C6	61.11
7	SC7	47.22	SR7	50.00	C7	58.33

8	SC8	47.22	SR8	52.78	C8	55.56
9	SC9	61.11	SR9	50.00	C9	55.56
10	SC10	61.11	SR10	52.78	C10	52.78
11	SC11	55.56	SR11	58.33	C11	52.78
12	SC12	52.78	SR12	55.56	C12	63.89
13	SC13	52.78	SR13	55.56	C13	55.56
14	SC14	66.67	SR14	58.33	C14	58.33
15	SC15	52.78	SR15	55.56	C15	66.67
16	SC16	69.44	SR16	55.56	C16	52.78
17	SC17	55.56	SR17	55.56	C17	58.33
18	SC18	55.56	SR18	55.56	C18	55.56
19	SC19	63.89	SR19	55.56	C19	55.56
20	SC20	50.00	SR20	50.00	C20	55.56
21	SC21	63.89	SR21	61.11	C21	58.33
22	SC22	52.78	SR22	55.56	C22	58.33
23	SC23	55.56	SR23	58.33	C23	61.11
24	SC24	55.56	SR24	55.56	C24	55.56
25	SC25	61.11	SR25	63.89	C25	50.00
26	SC26	69.44	SR26	66.67	C26	63.89
27	SC27	50.00	SR27	52.78	C27	55.56
28	SC28	58.33	SR28	61.11	C28	55.56
29	SC29	55.56	SR29	52.78	C29	52.78
30	SC30	58.33	SR30	52.78	-	-
Sum		1705.56	-	16667.67	-	16667.67
Lowest score		47.22	-	50.00	-	50.00
Highest score		69.44	-	66.67	-	66.67
Mean		56.85	-	55.56	-	57.47
Standard deviation		5.73	-	4.13	-	3.86

To find the Sum, the Lowest Score, Highest Score, Mean, and the Standard Deviation, researcher used manual calculation and SPSS 17.0.

According to the table of the students' pre-tests scores, the first experiment group (Self-Correct) had the lowest score was 47.22; the highest score

was 69.444; the mean was 56.85; with the standard deviation was 5,73. The second experiment group (Self-Repair) had the lowest score was 50.00; the highest score was 66,67; the mean was 55,56; with the standard deviation was 4,13. The Control group had the sum of the data was 1666.67; the lowest score was 50.00, the highest score was 66.67; the mean was 57.47; with the standard deviation was 3.86.

2. The result of Post-Test score of the Experiment Groups and Control Group

The Post-Test was conducted to the first experiment group (Self-Correct) in XI IPS 3 room on September 1st, 2014, at 10.15-11-45 am., second experiment group (Self-Repair) in XI IPS 2 room at 07.45-09.15 am., then followed by the control group in XI IPS 1 room at 12.00-13.30 am. The post-test scores of the groups were presented in Table 4.2.

Table 4.2. Students' Final Score of Post Test

No	Experiment Group (Self Correct) XI IPS 3		Experiment Group (Self Repair) XI IPS 2		Contro Group XI IPS1	
	Subjects	Score	Subjects	Score	Subjects	Score
1	SC1	80.56	SR1	69.44	C1	66.67
2	SC2	75.00	SR2	69.44	C2	61.11
3	SC3	75.00	SR3	72.22	C3	66.67
4	SC4	66.67	SR4	66.67	C4	66.67
5	SC5	75.00	SR5	66.67	C5	63.89
6	SC6	72.22	SR6	58.33	C6	63.89
7	SC7	63.89	SR7	80.56	C7	63.89
8	SC8	58.33	SR8	72.22	C8	61.11
9	SC9	77.78	SR9	61.11	C9	61.11
10	SC10	80.56	SR10	69.44	C10	66.67

11	SC11	72.22	SR11	75.00	C11	66.67
12	SC12	77.78	SR12	75.00	C12	75.00
13	SC13	83.33	SR13	72.22	C13	63.89
14	SC14	83.33	SR14	77.78	C14	52.78
15	SC15	80.56	SR15	63.89	C15	86.11
16	SC16	75.00	SR16	75.00	C16	80.56
17	SC17	75.00	SR17	80.56	C17	72.22
18	SC18	83.33	SR18	69.44	C18	55.56
19	SC19	75.00	SR19	66.67	C19	69.44
20	SC20	75.00	SR20	66.67	C20	75.00
21	SC21	83.33	SR21	80.56	C21	63.89
22	SC22	63.89	SR22	66.67	C22	63.89
23	SC23	72.22	SR23	77.78	C23	61.11
24	SC24	72.22	SR24	72.22	C24	61.11
25	SC25	69.44	SR25	80.56	C25	63.89
26	SC26	83.33	SR26	77.78	C26	80.56
27	SC27	58.33	SR27	72.22	C27	58.33
28	SC28	77.78	SR28	77.78	C28	58.33
29	SC29	83.33	SR29	58.33	C29	63.89
30	SC30	69.44	SR30	72.22	-	-
Sum		2238.89	-	2144.45	-	1913.89
Lowest score		58.33	-	58.33	-	52.77
Highest score		83.33	-	80.56	-	86.11
Mean		74.63	-	71.48	-	66.99
Standard deviation		7.18	-	6,36	-	7.56

To find Lowest Score, Highest Score, Mean, and the Standard Deviation, researcher used manual calculation and SPSS 17.0.

According to the table of the students' post-tests scores, the first experiment group (Self-Correct) had the lowest score was 58.33; the highest score was 83.33; the mean was 74.62; with the standard deviation was 7.18. The second experiment group (Self-Repair) had the lowest score was 58.33; the highest score

was 80.56; the mean was 71,48; with the standard deviation was 6.36. The Control group had the lowest score was 52.77; the highest score was 86.11; the mean was 65.99; with the standard deviation was 7.56.

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

a. The Comparasion of Pre-Test and Post-Test Scores in Self-Correct Group

The comparasion between students' pre-test and post-test after doing the experiment can be seen in the following Table 4.3.

Table 4.3. The Comparasion of Pre-Test and Post-Test Scores in Self-Correct Group

No	Subject	Pre-Test	Post-Test	Improvement
1	SC1	55.56	80.56	25.00
2	SC2	55.56	75.00	19.44
3	SC3	52.78	75.00	22.22
4	SC4	58.33	66.67	8.34
5	SC5	55.56	75.00	19.44
6	SC6	55.56	72.22	16.67
7	SC7	47.22	63.89	16.67
8	SC8	47.22	58.33	11.11
9	SC9	61.11	77.78	16.67
10	SC10	61.11	80.56	19.45
11	SC11	55.56	72.22	16.67
12	SC12	52.78	77.78	25.00
13	SC13	52.78	83.33	30.56
14	SC14	66.67	83.33	16.67
15	SC15	52.78	80.56	27.78
16	SC16	69.44	75.00	5.56

17	SC17	55.56	75.00	19.44
18	SC18	55.56	83.33	27.78
19	SC19	63.89	75.00	11.11
20	SC20	50.00	75.00	25.00
21	SC21	63.89	83.33	19.44
22	SC22	52.78	63.89	11.11
23	SC23	55.56	72.22	16.67
24	SC24	55.56	72.22	16.67
25	SC25	61.11	69.44	8.33
26	SC26	69.44	83.33	13.89
27	SC27	50.00	58.33	8.33
28	SC28	58.33	77.78	19.45
29	SC29	55.56	83.33	27.78
30	SC30	58.33	69.44	11.11
Sum		1705.56	2238.89	-
Lowest score		47.22	58.33	-
Highest score		69.44	83.33	-
Mean		56.85	74.63	-
Standard deviation		5.73	7.18	-

b. The Comparasion of Pre-Test and Post-Test Scores in Self-Repair Group

The comparasion between students' pre-test and post-test after doing the experiment can be seen in the following Table 4.4.

Table 4.4. The Comparasion of Pre-Test and Post-Test Scores in Self-Repair Group

No	Subject	Pre-Test	Post-Test	Improvement
1	SR1	58.33	69.44	11.11
2	SR2	50.00	69.44	19.44
3	SR3	50.00	72.22	22.22
4	SR4	58.33	66.67	8.33
5	SR5	55.56	66.67	11.11
6	SR6	52.78	58.33	5.56

7	SR7	50.00	80.56	30.56
8	SR8	52.78	72.22	19.44
9	SR9	50.00	61.11	11.11
10	SR10	52.78	69.44	16.67
11	SR11	58.33	75.00	16.67
12	SR12	55.56	75.00	19.44
13	SR13	55.56	72.22	16.67
14	SR14	58.33	77.78	19.45
15	SR15	55.56	63.89	8.33
16	SR16	55.56	75.00	19.44
17	SR17	55.56	80.56	25.00
18	SR18	55.56	69.44	13.89
19	SR19	55.56	66.67	11.11
20	SR20	50.00	66.67	16.67
21	SR21	61.11	80.56	19.45
22	SR22	55.56	66.67	11.11
23	SR23	58.33	77.78	19.45
24	SR24	55.56	72.22	16.67
25	SR25	63.89	80.56	16.67
26	SR26	66.67	77.78	11.11
27	SR27	52.78	72.22	19.44
28	SR28	61.11	77,78	16.67
29	SR29	52.78	58.33	5.56
30	SR30	52.78	72.22	19.44
Sum		1666.67	2144.45	-
Lowest score		50.00	58.33	-
Highest score		66.67	80.56	-
Mean		55.56	71.48	-
Standard deviation		4.13	6.36	-

B. Testing Normality and Homogeneity

1. Normality Test

In this study, researcher used One-Sample Kolmogorov-Smirnov Test to test the normality.

1.a. Experiment Group (Self-Correct)

Table 4.5. The Normality Test of Experiment Group (Self-Correct)

One-Sample Kolmogorov-Smirnov Test

		Self-Correct
N		30
Normal Parameters ^{a,b}	Mean	74.63
	Std. Deviation	7.18
Most Extreme Differences	Absolute	.15
	Positive	.11
	Negative	-.15
Kolmogorov-Smirnov Z		.84
Asymp. Sig. (2-tailed)		.48

Based on the calculation used SPSS 17 program, the normality of experiment group (self-Correct) was 0.48. The normality of the class was consulted with χ^2 table of Kolmogorov-Smirnov with the level of significance 5% or $\chi^2_{table} = 0.05$. From the table above showed that the $\chi^2_{experiment}$ was higher than χ^2_{table} ($0.48 \geq 0.05$), so the data was in normal distribution.

1.b. Experiment Group (Self-Repair)

Table 4.6. The Normality Test of Experiment Group (Self-Repair)

One-Sample Kolmogorov-Smirnov Test

		Self-Repair
N		30
Normal Parameters ^{a,b}	Mean	71.48
	Std. Deviation	6.36
Most Extreme Differences	Absolute	.11
	Positive	.09
	Negative	-.11
Kolmogorov-Smirnov Z		.62
Asymp. Sig. (2-tailed)		.84

Based on the calculation used SPSS 17 program, the normality of experiment group (self-Repair) was 0.84. The normality of the class was consulted with χ^2 table of Kolmogorov- Smirnov with the level of significance 5% or $\chi^2_{table} = 0.05$. From the table above showed that the $\chi^2_{experiment}$ was higher than χ^2_{table} ($0.84 \geq 0.05$), so the data was in normal distribution.

1.c. Control Group

Table 4.7. The Normality Test of Control Group

One-Sample Kolmogorov-Smirnov Test

		Control Group
N		29
Normal Parameters ^{a,b}	Mean	65.99
	Std. Deviation	7.56
Most Extreme Differences	Absolute	.22
	Positive	.22
	Negative	-.12
Kolmogorov-Smirnov Z		1.20
Asymp. Sig. (2-tailed)		.11

Based on the calculation used SPSS 17 program, the normality of Control Group was 0.11. The normality of the class was consulted with χ^2 table of Kolmogorov- Smirnov with the level of significance 5% or $\chi^2_{table} = 0.05$. From the table above showed that the $\chi^2_{experiment}$ was higher than χ^2_{table} ($0.11 \geq 0.05$), so the data was normal in distribution.

2. Homogeneity Test

Levene Test Statistic was used to know the homogeneity of variance.

Table 4.8. The homogeneity Test of Variances

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.08	2	86	.92

Based on the calculating used SPSS 17.0 program, the data showed the significance was 0.92. The significant of the Levene test statistic was higher than 0.05 ($0.92 \geq 0.05$). It meant that the scores were not violated the homogeneity.

C. Testing Hypothesis

The problems of the study were to measure the effect of teacher's corrective feedback using self-correct and self-repair, and to measure the significant difference between both methods on students' speaking score. To answer the problems, researcher used One-Way Anova calculation. The criteria of H_0 is accepted when $F_{\text{value}} \leq F_{\text{table}}$, and the H_0 is refused when $F_{\text{value}} \geq F_{\text{table}}$. Then the criteria H_a is accepted when $F_{\text{value}} \geq F_{\text{table}}$, and H_a is refused when $F_{\text{value}} \leq F_{\text{table}}$. Or The criteria of H_0 was accepted when the significant value ≥ 0.05 , and H_0 was refused when the significant value ≤ 0.05 .

a. One-Way ANOVA Manual Calculation

To answer the problems, researcher used One-Way Anova manual calculation. The researcher calculated:

1. Degree of Freedom Between Groups (DFb) and Within Groups (DFw)

$$DFb = K - 1 = 3 - 1 = 2$$

$$DFb = 2$$

$$DFw = N - K = 89 - 3 = 86$$

$$DFw = 86$$

$$F_{table} = 3.11$$

2. Average of X_1 , X_2 , and X_3 .

Average X_1 = Average of X_1 (Self-Correct Scores)

$$\text{Average } X_1 = 74.63$$

Average X_2 = Average of X_2 (Self-Repair Scores)

$$\text{Average } X_2 = 71.48$$

Average X_3 = Average of X_3 (Control Group Scores)

$$\text{Average } X_3 = 65.99$$

3. Grand Mean/Total (GM)

$$GM = \frac{X_1 + X_2 + X_3}{N} = \frac{6277.22}{89}$$

$$GM = 70.76$$

4. Sum of Total Squares (SSt)

$$SSt = \sum (X - GM)^2 = (X_1 - GM)^2 + (X_2 - GM)^2 + (X_3 - GM)^2$$

$$SSt = 5387.23$$

5. Sum of Squares Within Group (SSw)

$$SSw = \sum (X_1 - \text{Average } X_1)^2 + (X_2 - \text{Average } X_2)^2 + (X_3 - \text{Average } X_3)^2$$

$$SSw = 4264.98$$

6. Sum of Squares Between Group (SSb)

$$SSb = SSt - SSw$$

$$SSb = 5387.23 - 4264.3$$

$$SSb = 1122.63$$

7. Mean Square Between Group (MSb)

$$MSb = \frac{SSb}{DFb}$$

$$MSb = \frac{1122.63}{2}$$

$$MSb = \mathbf{561.47}$$

8. Mean Square Within Group (MSw)

$$MSw = \frac{SSw}{DFw}$$

$$MSw = \frac{4264.93}{86}$$

$$MSw = \mathbf{49.59}$$

9. F_{value}

$$F_{\text{value}} = \frac{MSb}{MSw}$$

$$F_{\text{value}} = \frac{561.31}{49.59}$$

$$F_{\text{value}} = \mathbf{11.32}$$

10. Table of One-Way ANOVA manual calculation

Table. 4.9 One-Way ANOVA manual calculation

	Sum of Squares	Degree of Freedom (Df)	Mean Square	F_{Value}	Sig
Between Group	1122.63	2	561.31	11.32	.00
Within Group	4264.98	86	49.59		
Total	5387.61	88			

$$11. F_{\text{crit/table}} = 3.11$$

$$F_{\text{value}} = 11.32$$

$$F_{\text{value}} \geq F_{\text{crit/table}} = 11.32 \geq 3.11$$

12. $F_{\text{value}} \leq F_{\text{table}} = H_0$ is accepted

$F_{\text{value}} \geq F_{\text{table}} = H_0$ is refused

Since F_{value} was higher than F_{table} ($11.32 \geq 3.11$), It meant H_0 was refused and H_a was accepted. There was significant differences among groups.

b. One Way ANOVA SPSS 17.0 Calculation

To make sure the manual calculation, SPSS 17.0 statistic program was conducted in this study.

Table 4.10. One Way ANOVA SPSS 17.0

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1122.63	2	561.31	11.32	.00
Within Groups	4264.98	86	49.59		
Total	5387.61	88			

Based on the SPSS 17.0 statistic program calculation, the result showed that Degree of Freedom Between Groups (DFb)= 2 and Degree of Freedom Within Groups (DFw)= 86 ($F_{\text{table}}=3.11$). Then F_{value} was 11.32. It showed F_{value} was higher than F_{table} ($11.32 \geq 3.11$). So, H_0 was refused and H_a was accepted. There was significant differences among groups after doing the treatment, with $F_{\text{value}} = 11.32$ and the significant level was lower than alpha (α) ($0.00 \leq 0.05$).

Knowing that there was significant differences among groups after doing the treatment, researcher needed to test the hypotheses. Because ANOVA was only to know that there was significant differences among groups, not to

know where the differences among groups are, to answer the research problems and test the hypotheses, researcher applied **Post Hoc Test**.

Table 4.11. Post Hoc Test

Multiple Comparisons

Groups	Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Self-Correct	Self-Repair	3.15	1.82	.20	-1.19	7.48
	Control Group	8.63*	1.83	.00	4.26	13.01
Self-Repair	Self-Correct	-3.15	1.82	.20	-7.48	1.19
	Control Group	5.49*	1.83	.01	1.11	9.86
Control Group	Self-Correct	-8.63*	1.83	.00	-13.01	-4.26
	Self-Repair	-5.49*	1.83	.01	-9.86	-1.11

*. The mean difference is significant at the 0.05 level.

The criteria of H_0 is accepted when the significant value is higher than alpha (α) (0.05), and H_0 is refused when the significant value is lower than alpha (α) (0.05).

The first research problem was: Is there significant effect of teacher's corrective feedback using **self-correct** during oral interaction on speaking score of the eleventh grade students at SMA Negeri 1 Katingan Tengah; and the hypotheses are: a. Null Hypothesis (H_0): There is no significant effect of teacher's corrective feedback using self-correct on students' speaking score. b. Alternative Hypothesis (H_a): There is significance effect of teacher's corrective feedback using self-correct on students' speaking a score. Based on the

calculation used SPSS 17.0 statistic program, the result showed significant value was lower than alpha ($0.00 \text{ lower} \leq 0.05$). So, H_0 was refused and H_a was accepted, that giving feedback by Self-Correct method had significant effect on students' speaking score of the eleventh grade students at SMA Negeri 1 Katingan Tengah.

Second research problem was: Is there significant effect of teacher's corrective feedback using **self-repair** during oral interaction on speaking score of the eleventh grade students at SMA Negeri 1 Katingan Tengah; and the hypotheses are: a. Null Hypothesis (H_0); There is no significant effect of teacher's corrective feedback using self-repair on students' speaking score. b. Alternative Hypothesis (H_a); There is significance effect of teacher's corrective using feedback self-repair on students' speaking score. Based on the calculation used SPSS 17.0 statistic program, the result showed significant value was lower than alpha ($0.01 \leq 0.05$). So, H_0 was refused and H_a was accepted, that giving feedback by Self-repair method had significant effect on students' speaking score of the eleventh grade students at SMA Negeri 1 Katingan Tengah.

The third research problem was: Which type of corrective feedback is more effective on students' speaking score; and the hypotheses: a. Null Hypothesis (H_0); There is no significant different effect between teacher's corrective feedback feedback self-repair and self-correct on students' speaking score. b. Alternative Hypothesis (H_a); There is significant different effect between teacher's corrective feedback feedback self-repair and self-correct on students' speaking score. Based on the calculation used SPSS 17.0 statistic program, the

result showed significant value was higher than alpha ($0.20 \geq 0.05$). So, H_0 was accepted and H_a was refused, that there is no different effect between teacher's corrective feedback feedback self-repair and self- correct on students' speaking score of the eleventh grade students at SMA Negeri 1 Katingan Tengah.

c. Interpretation

Based on the resul of the research, researcher interpreted that:

1. Teacher's corrective feedback using **self-correct** was more effective on students' speaking score than teaching English without giving the corrective feedback. It was shown that the result showed significant value was lower than alpha ($0.00 \text{ lower} \leq 0.05$).
2. Teacher's corrective feedback using **self-repair** was more effective on students' speaking score than teaching English without giving the corrective feedback. It was shown that the result showed significant value was lower than alpha ($0.01 \text{ lower} \leq 0.05$).
3. There was no significant different effect between teacher's corrective feedback using self-repair and self-correct on students' speaking score, both methods were effective in improving students' speaking score. It was based on the calculation used SPSS 17.0 statistic program, the result showed significant value was higher than alpha ($0.20 \geq 0.05$). Based on the output of the Mean, it can be concluded that Self-Correct (Mean: 74.63) is more effective than Self-Repair (Mean: 71.48).