CHAPTER IV

RESULT AND DISCUSSION

In this chapter, the writer try to interpret the data that had been gotten from the process before, it was consist of the processing of pretest, the processing of post-test, comparing the pre test and the post test, t-test calculation by statistical calculation the hypothesis testing, and discussion of research finding. The writer conducted the library research and field research to obtain the result of the students' writing score in experiment class and control class. The writer held field research through observes in the teaching-learning process and then the writer got the data from pre-test and post-test. The pre-test was given before the lesson begins and the post-test was given after the lesson finished.

A. The Processing of Pre-Test Score

Pre-test was given to the sample before scaffolding technique was applied to the class, the purpose of the pre-test is to measure and analysis students' writing skills. The score of pre-test is gotten from 1 items of essay with maximal score is 100, on the other hand the maximum score of the pre-test is 100 and the minimum score is 5. The result of the pre-test can be seen on the table below.

Table 4.1

The Score of Pre Test in experiment class

NO	NAME	SCORE (x1)
1.	AHM	5
2.	AJL	56
3.	AMR	40
4.	BF	54
5.	DA	37
6.	DNN	54
7.	DTA	54
8.	FA	15
9.	FI	5
10.	IF	46
11.	IYA	46
12.	JA	50
13.	LKH	54
14.	MA	5
15.	MS	0
16.	MSI	36

17.	NM	5
18.	NN	54
19.	NUH	60
20.	SI	5
21.	SIC	54
22.	SN	24
23.	SNH	5
24.	SRS	53
25.	SUD	53
26.	TIS	43
27.	TUA	46
28.	VAA	54
29.	VDS	38
30.	WDI	35
Total		1,086
Average		36,2

Based on the data on the table above, the highest score of the pre-test in experiment class is 60 and the lowest score is 0. The writer calculated mean

score of the pre-test to know how the students' writing skills, to find out mean score of the pre-test, the writer used the formula below:

M_X or $M_1 = \frac{\Sigma X1}{N1}$

$= \frac{1,086}{30}$

= 36,2

Based on mean calculation above, the mean score of the pre-test is 33,72, it shows that the students have a lack listening skill or students writing skills is still low.

Table 4.2

The Score of Pre Test in control class

NO	NAME	SCORE (y1)
1.	ALP	3
2.	AMS	42
3.	AMS	0
4.	EF	60
5.	FH	43
6.	FTI	45

7.	LN	52
8.	MLI	71
9.	MRH	59
10.	NBI	57
11.	NDA	43
12.	NM	5
13.	NUI	40
14.	OKY	61
15.	PW	72
16.	QA	60
17.	RAI	43
18.	RIA	67
19.	SJI	43
20.	SSA	26
21.	SSI	57
22.	STA	48
23.	STH	5
24.	STN	58
25.	STS	57

26.	SLI	39
27.	SMI	48
28.	TA	38
29.	WI	48
30.	WS	37
Mean		1,327
Average		44,233

Based on the data on the table above, the highest score of the pre-test in control class is 72 and the lowest score is 0. The writer calculated mean score of the pre-test to know how the students' writing skills, to find out mean score of the pre-test, the writer used the formula below:

M_Y or $M_2 = \frac{\sum Y1}{N2}$

$= \frac{1,327}{30}$

=44,233

B. The Processing of Post Test Score

The post-test was given to the sample after scaffolding was applied to the class, the purpose of the post-test is to measure and analysis students' writing skills after applying scaffolding technique to teach English listening. The score

of the post-test is gotten from 1 of essay, on the other hand the maximum score of the pre-test is 100 and the minimum score is 5. The result of the pre-test can be seen on the table below.

Table 4.3

The Score of Post test in experiment class

NO	**NAME**	**SCORE (x2)**
1.	AHM	77
2.	AJL	69
3.	AMR	65
4.	BF	46
5.	DA	75
6.	DNN	74
7.	DTA	71
8.	FA	69
9.	FI	70
10.	IF	74
11.	IYA	75
12.	JA	75
13.	LKH	71

14.	MA	73
15.	MS	71
16.	MSI	55
17.	NM	72
18.	NN	71
19.	NUH	67
20.	SI	73
21.	SIC	72
22.	SN	67
23.	SNH	75
24.	SRS	71
25.	SUD	70
26.	TIS	66
27.	TUA	10
28.	VAA	75
29.	VDS	69
30.	WDI	74
Mean		2,038
Average		67,933

Based on the data on the table above, the highest score of the post-test is 77 and the lowest score is 10. The writer calculated mean score of the post-test to know how the students' writing skills, to find out mean score of the post-test in experiment class, the writer used the formula below:

M_X or $M_1 = \frac{\Sigma X2}{N1}$

$= \frac{2,038}{30}$

=67,933

Based on mean calculation above, the mean score of the posttest is 67,82 . Actually no all of the samples' scores are increase from the pre-test to the post-test but generally scaffolding had given positive impact to students' writing skills, it can be seen from the mean score of the post-test.

Table 4.4

The Score of Post test in control class

NO	NAME	SCORE
1.	ALP	50
2.	AMS	48
3.	AMS	72

4.	EF	76
5.	FH	32
6.	FTI	25
7.	LN	37
8.	MLI	12
9.	MRH	72
10.	NBI	10
11.	NDA	71
12.	NM	73
13.	NUI	72
14.	OKY	68
15.	PW	18
16.	QA	17
17.	RAI	71
18.	RIA	63
19.	SJI	20
20.	SSA	11
21.	STA	36
22.	SSI	25

23.	STH	41
24.	STN	50
25.	STS	74
26.	SLI	9
27.	SMI	23
28.	TA	47
29.	WI	31
30.	WS	39
Mean		1,293
Average		43,1

Based on the data on the table above, the highest score of the post-test is 77 and the lowest score is 10. The writer calculated mean score of the post-test to know how the students' writing skills, to find out mean score of the post-test in control class, the writer used the formula below:

M_Y or $M_2 = \frac{\Sigma Y2}{N2}$

$= \frac{1,293}{30}$

=43,1

C. Comparing the Pre Test and the Post Test

In this part, the writer compares the pre-test score and the posttest score to find out the derivation and standard error effectiveness of using scaffolding technique in teaching listening in experiment class. The writer compares both of them by using t-test calculation, and the data of the pre –test and the post-test can be seen on the table below:

Table 4.5

The Data of Pre Test and Post Test in experiment class

NO	**NAME**	Pre test (x1)	Post test (X2)	x (X2-X1)	x^2 $(X2-X1)^2$
1.	AHM	5	77	72	5184
2.	AJL	56	69	13	169
3.	AMR	40	65	25	625
4.	BF	0	46	46	2116
5.	DA	37	75	40	1600
6.	DNN	54	74	20	400
7.	DTA	54	71	17	289
8.	FA	15	69	54	2916
9.	FI	5	70	65	4225

10.	IF	46	74	28	784
11.	IYA	46	75	29	841
12.	JA	50	75	25	625
13.	LKH	54	71	17	289
14.	MA	5	73	68	4624
15.	MS	0	71	71	5041
16.	MSI	36	55	19	361
17.	NM	5	72	67	4489
18.	NN	54	71	17	289
19.	NUH	60	67	7	49
20.	SI	5	73	68	4624
21.	SIC	54	72	18	324
22.	SN	24	67	43	1849
23.	SNH	5	75	70	4900
24.	SRS	53	71	18	324
25.	SUD	53	70	17	289
26.	TIS	43	66	23	529
27.	TUA	46	10	-36	1296
28.	VAA	54	75	21	441

29.	VDS	38	69	31	961
30.	WDI	35	74	39	1521
Mean		1,086	2,038	1,012	51974
Average		36,2	67,933	33,733	1,732

The first the writer find out the Determining derivation score variable X that is in experiment class with formula :

SD_1 or $SD_X = \sqrt{\frac{\sum X^2}{N_1}}$

$= \sqrt{\frac{51,974}{30}}$

$= \sqrt{1,732}$

= 41,617

And then Determining standard error mean variable X with formula :

SD_{MX} or $SE_{M_1} = \frac{SD_1}{\sqrt{N_1 - 1}}$

$= \frac{41,617}{\sqrt{30-1}}$

$= \frac{41,617}{\sqrt{29}}$

$= \frac{41,617}{5,385}$

=7.728

Table 4.6

The Data of Pre Test and Post Test in control class

NO	**NAME**	Pre test (Y1)	Post test (Y2)	Y $(y2-y1))$	y^2 $(y2-y1)^2$
1.	ALP	3	50	47	2,209
2.	AMS	42	48	6	36
3.	AMS	0	72	72	5,184
4.	EF	60	76	16	256
5.	FH	43	32	-11	121
6.	FTI	45	25	20	400
7.	LN	52	37	-15	225
8.	MLI	71	12	-59	3,481
9.	MRH	59	72	13	169
10.	NBI	57	10	-47	2,209
11.	NDA	43	71	28	784
12.	NM	5	73	68	4,624

13.	NUI	40	72	32	1,024
14.	OKY	61	68	7	49
15.	PW	72	18	-54	2,916
16.	QA	60	17	-43	1,849
17.	RAI	43	71	28	784
18.	RIA	67	63	-4	12
19.	SJI	43	20	-23	529
20.	SSA	26	11	-15	225
21.	STA	57	36	-21	441
22.	SSI	48	25	-23	529
23.	STH	5	41	36	296
24.	STN	58	50	-8	64
25.	STS	57	74	17	289
26.	SLI	39	9	-30	900
27.	SMI	48	23	-25	625
28.	TA	38	47	19	361
29.	WI	48	31	-17	289
30.	WS	37	39	2	4
Mean		1,327	1,293	16	30866

Average	44,233	43,1	0,533	1,028

The first the writer find out the Determining derivation score variable Y that is in control class with formula :

SD_2or $SD_Y = \sqrt{\frac{\sum Y^2}{N_2}}$

$=\frac{1,028}{\sqrt{30-1}}$

$=\frac{1,028}{\sqrt{29}}$

$=\frac{1,028}{5,385}$

=0,190

And then Determining standard error mean variable Y with formula :

SD_{My} or $SE_{M_2} = \frac{SD_2}{\sqrt{N_2-1}}$

$=\frac{0,190}{\sqrt{30-1}}$

$=\frac{0,190}{\sqrt{29}}$

$=\frac{0,190}{5,385}$

=0,003

The second Determining standard error differences between mean of variable X and mean of variable Y with formula :

$$SE_{M_1 - M_2} = \sqrt{SE_{M_1}{}^2 + SE_{M_2}{}^2}$$

$$= \sqrt{7{,}728^2 + 0{,}003^2}$$

$$= \sqrt{59{,}721 + 0{,}009}$$

$$= \sqrt{59{,}721}$$

$$= 244{,}473$$

After that, the writer does t-test calculation by using the formula for pre-test and post-test one group design. The writer input score of the mean of differences value between the pre-test and the post-test, score of the quadrate deviation total, and the number of sample into t-test formula.

$$t_o = \frac{M_1 - M_2}{SD_{M_1 - M_2}}$$

$$= \frac{67{,}933 - 43{,}1}{244{,}473}$$

$$= \frac{67{,}889}{244{,}473}$$

$$= 0{,}277$$

Then, the writer looks for degree of freedom or d.f with the number of sample is 54, the calculation process as follows:

d.f = $(N_1+N_2) - 2$

= (30+30)-2

= **58**

The last step is comparing the result of t_0 with t table, exactly in rate t_{005} and t_{001}. The rate for t_{005} with N **58** is 2,002 and t_{001} is 2,392. Because the result of t-test is 0,277, it shows that $t_{001} > t_0 < t_{005}$ or 2,392 > 0,277 < 2,002, it can be concluded that the value of t_{table} is higher than t_0.

D. The Hypothesis Testing

To examine the hypothesis by determine the significant differences between two variables with criteria:

a. Working hypothesis (H1) t-test > t-table, so there is significant differences between control class and experiment class.
b. Null hypothesis (Ho) t-test < t-table if there is no significant differences between control class and experiment class.

Note:

If $t_0 > t_t$: There is a significant effect and the alternative hypothesis is (H_1) is accepted.

If $t_0 < t_t$: There is no significant effect and the null hypothesis (H_0) is accepted.

The hypothesis criterion states that If $t_0 > t_t$, the alternative hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected, and If $t_0 < t_t$ the alternative hypothesis (H_1) is rejected and the null hypothesis (H_0) is accepted.

Based on the result of statistic calculation above, it is obtained that the value of t_0 = 0,277, it is smaller than the value of t_t in significancy 5% = 2,002 and 1% = 2,392 with d.f = 58. 2,392 > 0,277 < 2,002. It means that the H_1 is rejected and H_0 is accepted. It can be concluded that scaffolding technique has no a significant effect on the students' writing skill.

E. Discussion of Research Finding

Based on the data calculation above, it show that the students have a trouble and low ability in writing skill before scaffolding was applied in class, it can be seen at the mean score of the pre-test in experiment class (36,2), the score is still under of the criteria of minimum Students listening skill after applied scaffolding as a technique in writing activity increases significantly, it can be

seen from the mean score of post-test in experiment class (67,933) where it is higher than the pre test.

The effectiveness of scaffolding toward students' writing skill is can be seen from t-test calculation where the value of t-test is 0,277, it is smaller than t005 (2,002) and t001 (2,392). Finally, the result of the study is H1 is rejected and H0 is accepted, on the other hand, there is no significant effect of using scaffolding technique toward students' writing skill.