CHAPTER IV

THE RESULT AND DISCUSSION

A. Result of Student's Response of Using Scaffolding Technique

The result of interview sheet about student's response of teaching writing narrative text through scaffolding technique at first grade senior high school of Al-Irsyad.

These are five questions of the interview :

1. Do you agree that learn writing using scaffolding technique can increase writing skill?
2. Do you understand the lesson that has delivered by researcher about writing narrative?
3. How is your opinion about learning writing with using scaffolding technique?
4. How is your opinion about the differences of learning writing narrative text between using traditional technique and using scaffolding technique?
5. What is your reason that you prefer to choose traditional technique/scaffolding technique?

Based on the research, the researcher takes a result that from question 1 and question 2 all students in experimental class was answered yes, it mean 100% they agree that scaffolding technique can increase writing skill in narrative text and they were understood the lesson that has delivered by researcher about writing narrative.

While the students' answer in question 3 mostly giving statement that scaffolding technique is one of suitable technique and has to be applied into class room to help the students easier to achieve the goals of the learning. Then in question 4-5 the students opined that there were differences between traditional technique and scaffolding technique. In scaffolding technique they can understand easily because when teacher do modelling all students are required to create the other example until the students understanding, whereas traditional technique focused on the teacher which make students feel bored. So they prefer to have scaffolding technique.

B. Result of the Application Scaffolding Technique in Teaching

Based on the result of the observation was done by the experiment class (X IPA), there were two indicators observed by the

English teacher namely students' enthusiastic in learning and learning process. Here is the observation sheet.

Table 4.1

Result of Observation Sheet

No	Observation aspect	Score				
		1	2	3	4	5
	Students' enthusiastic in learning a. Students have an interest in learning writing in narrative text through scaffolding technique b. Students are enjoy in teaching learning				√ √	
	Learning process • Student a. Students follow the teachers' instructions b. Student listen the teacher explanation about the material c. Students make an interaction or ask something about learning writing with a teacher d. Students do the task making narrative text				√ √	√ √

	• Teacher's competence a. Teacher explain the material briefly b. Teacher is able to trigger students interest in writing c. Teacher act as facilitator in learning process d. Teacher make the class conducive e. Teacher is able to make students enjoy learning writing				√ √ √	 √ √
Total		∑ X = 48				

Notes :

5 = extremely good

4 = good

3 = fair

2 = low

1 = extremely low

Determining Mean score with formula:

Mean = $\frac{\sum X}{N}$

= $\frac{48}{11}$ = 4,36.

It means that the result of the observation sheet is good, and the application the activities of teaching writing narrative text through scaffolding technique applied well. Because the explanation in score 4,3 include in score 4, it is good, it means the English teacher assess that the implementation of Scaffolding technique in the class room running smoothly. The Indicator of observation include student's enthusiastic in learning, students have had an interest in learning narrative text. It showed when teaching-learning process students were enjoy in studying using scaffolding technique. The other indicators was learning process, it showed when learning process students followed the teacher's instruction, students listened the teacher explanation, students interested and make the task.

C. The Influence of Scaffolding Technique in Teaching Writing Narrative Text

1. Description of Data

In this the chapter, the writer would like to present description of the data obtained. The main goal of this research is to know the influences of scaffolding technique in teaching students' writing narrative text. The writer would attempt to submit the data as outcomes of research has hold in First Grade of SMA Al-Irsyad. The writer took 50 students as a subject in this research. It is divided into two classes. There are 25 students from X IPA as the experimental class and 25 students from X IPS as the control class.

To find out the influences of using Scaffolding technique, the writer identified some result, they are: the score of the students before treatment, the score of the students after treatment, the differences between pre-test and post-test

Scores of students and from the differences of students' condition between students who are taught by using scaffolding technique and students who are not taught by using scaffolding technique in teaching and learning process.

For getting valid data, this research uses t-test (pre-test and post-test) as its instrument. Pre-test is given before treatment and one other is given after treatment. In this chapter also will be presented the results of pre-test and post-test score of the experimental class and control class. To make it easier for reader to understand about the obtained data, some data are made in the form of tables and graphs. From here we can conclude whether the Scaffolding technique has an impact in improving students writing or not after all data are calculated using the t-test formula.

The maximum score of contents/ ideas was 30, the maximum score of organization was 20, the maximum score of vocabulary was 20, the maximum score of language use was 25, and the maximum score of mechanic was 5. The highest total score of all criteria as 100, and the lowest score of all criteria was 34. The writer describes the data at experimental and control class as bellow:

a. Experimental Class

The writer described the result of a pre-test at the experimental class by the table as follow:

Table 4.2

The Students' score of pre-test at the experimental class

No	Name	Criteria					Total Score
		Content	Organization	Vocabulary	Language use	Mechanics	
1	ARK	15	9	10	11	2	47
2	AIS	22	16	17	19	3	77
3	ANN	16	10	11	11	3	51
4	ARS	14	10	12	12	3	51
5	ASS	15	12	12	12	3	54
6	AUST	21	16	16	19	3	75
7	DEW	13	7	7	5	2	34
8	DUU	14	12	13	14	3	56
9	ILAF	16	12	14	12	3	57
10	KHK	13	9	10	9	2	43
11	LIH	14	11	13	13	2	53
12	MR	14	11	13	12	2	52
13	MUA	18	15	16	17	3	69
14	MIM	17	14	16	13	2	62
15	MFM	13	12	13	13	2	53
16	NADO	23	17	17	20	4	81
17	NRH	22	16	17	19	4	78
18	RKI	14	12	14	13	2	55
19	SHL	14	11	13	12	2	52
20	SIAW	14	12	14	13	2	55
21	ULA	22	16	17	19	4	78
22	UMH	16	14	14	14	2	60
23	VIRS	15	13	14	14	2	58
24	WU	14	9	9	8	2	42
25	WA	17	14	16	13	3	63

N = 25	**Total Score**	**1456**
	Average	**58,24**

The *Table 4.2* above showed the result of the students' pre-test scores on the criteria in writing on narrative text at the experimental class. The data showed that the maximum score was 81 and the minimum score was 34. One student who got the maximum and one students who got the minimum score. The average score of the pre-test was 58,24.

While the result of a post-test score at the experimental class got better. It can be describe as follow:

Table 4.3

The Students' score of post-test at the experimental class

No	**Name**	**Criteria**					**Total Score**
		Content	**Organization**	**Vocabulary**	**Language use**	**Mechanics**	
1	ARK	22	14	15	19	3	73
2	AIS	26	16	17	19	3	81
3	ANN	24	14	15	18	3	74
4	ARS	22	14	15	19	3	73
5	ASS	26	16	16	20	3	81
6	AUST	28	17	17	22	4	88
7	DEW	14	10	9	11	2	46
8	DUU	22	14	16	20	3	75

9	ILAF	24	15	17	19	3	78
10	KHK	21	12	13	16	3	65
11	LIH	23	12	15	19	2	71
12	MR	22	12	14	18	2	68
13	MUA	27	15	17	21	3	83
14	MIM	26	15	17	21	3	82
15	MFM	22	12	15	19	3	71
16	NADO	27	17	18	22	4	88
17	NRH	28	17	18	23	4	90
18	RKI	22	14	15	17	3	71
19	SHL	20	15	16	16	3	70
20	SIAW	21	14	16	18	3	72
21	ULA	26	17	17	22	4	86
22	UMH	22	15	15	21	3	76
23	VIRS	23	14	15	18	3	73
24	WU	19	11	12	16	3	61
25	WA	21	15	16	21	3	76
N = 25		**Total Score**					**1872**
		Average					**74,88**

The *Table 4.3* above showed the results of the students' post-test scores on the criteria of writing narrative text at the experimental class. The data showed that the maximum score was 90, and the minimum score was 46.

The explanation above showed the result of post-test at the experimental class got the significant improvement after giving treatment, it is seen from the average of the post-test was better than the average of the pre-test, that 58,24<74,88.

b. Control Class

The writer describes the result of a pre-test at the control class by the table below:

Table 4.4

The Students' score of pre-test at the control class

No	Name	Criteria					Total Score
		Content	Organization	Vocabulary	Language use	Mechanics	
1	AGA	16	9	9	10	2	46
2	AHF	13	7	7	5	2	34
3	ALM	19	13	12	16	2	62
4	ALH	20	13	14	15	3	65
5	ANF	20	12	13	14	3	62
6	ANFI	20	13	12	15	3	63
7	AYY	19	13	14	16	3	65
8	AYS	18	11	10	14	2	55
9	BEK	21	14	15	17	3	70
10	DER	20	13	12	15	3	63
11	FMH	19	12	14	16	3	64
12	FNH	18	14	13	16	3	64
13	FEF	14	8	7	6	2	37
14	HRH	15	13	12	15	2	57
15	HYH	13	7	7	5	2	34
16	HDH	16	12	13	15	2	58
17	MFR	14	8	9	10	2	43
18	MJM	14	8	8	10	2	42
19	MMH	16	9	10	11	2	48
20	NAA	22	15	16	20	3	76
21	RMT	13	7	7	5	2	34

22	SOH	15	10	10	13	2	50
23	SYS	19	15	16	17	3	70
24	TOEBS	17	14	15	17	2	65
25	YUS	18	14	15	17	3	67
N = 25		**Total Score**					**1394**
		Average					**55,76**

The *Table 4.4* showed the results of the students' pre-test scores on the criteria in writing narrative text at the control class. the data showed the maximum score was 76, and the minimum score was 34. One student who got the maximum and three students who got the minimum score. The average of the score of the pre-test was 55,76. While the result of a post-test at the control class better then pre-test score. It can be described as follow:

Table 4.5

The Students' score of post-test at the control class

No	**Name**	**Criteria**					**Total Score**
		Content	**Organization**	**Vocabulary**	**Language use**	**Mechanics**	
1	AGA	17	10	10	11	3	51
2	AHF	15	8	8	9	2	42
3	ALM	20	13	13	17	3	66
4	ALH	22	17	18	21	3	81
5	ANF	20	13	14	15	3	65
6	ANFI	21	14	15	16	3	69

7	AYY	20	13	16	17	3	69
8	AYS	19	12	12	15	2	60
9	BEK	23	16	18	19	3	79
10	DER	22	16	14	17	3	72
11	FMH	20	13	14	17	3	67
12	FNH	19	15	14	18	3	69
13	FEF	15	10	8	9	2	44
14	HRH	17	16	15	17	3	68
15	HYH	15	9	9	13	2	48
16	HDH	18	15	15	17	3	68
17	MFR	16	11	14	16	2	59
18	MJM	16	10	12	14	2	54
19	MMH	17	10	10	13	3	53
20	NAA	25	18	17	21	4	85
21	RMT	14	8	9	8	2	41
22	SOH	17	12	12	14	3	58
23	SYS	22	16	17	18	4	77
24	TOEBS	19	15	16	18	3	71
25	YUS	20	16	16	18	3	73
N = 25		**Total Score**					**1589**
		Average					**63,56**

The *Table 4.5* showed the results of the students' post-test scores on the criteria in writing narrative text at the control class. The data showed the maximum score was 85 and the minimum score was 41. One student who got the maximum score and one student who got the maximum score. The average score of the post-test was 65,56.

Based on the explanation above showed that the result of post-test at the control class got the significant improvement after giving treatment without using Scaffolding technique. It is seen from the average of the post-test got better than the pre-test, that 55,57<63,56.

2. Data Analysis

1. Experimental Class

The writer analysis the data by comparing students' score in pre-test and post-test in experimental class. It is explained by the table as follow:

Table 4.6

The different score between pre-test and post-test at experiment class

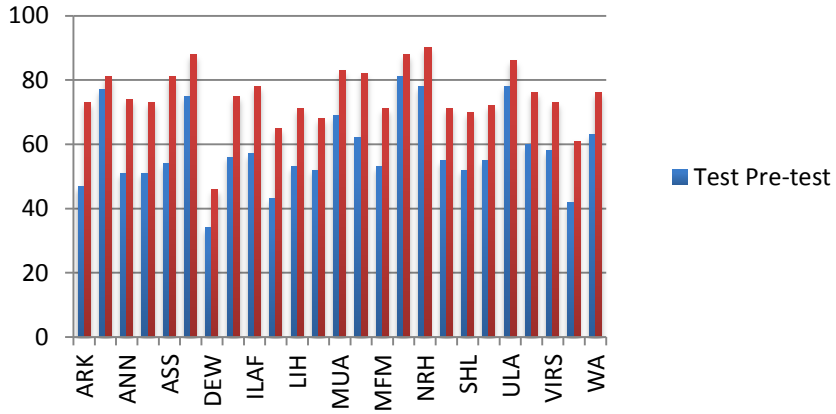
No	Name	Test		Deviation (X=X2-X1)	Squarded Deviation (X^2)
		Pre-test (X1)	Post-test (X2)		
1	ARK	47	73	26	676
2	AIS	77	81	4	16
3	ANN	51	74	23	529
4	ARS	51	73	22	484
5	ASS	54	81	27	729
6	AUST	75	88	13	169

7	DEW	34	46	12	144
8	DUU	56	75	19	361
9	ILAF	57	78	21	441
10	KHK	43	65	22	484
11	LIH	53	71	18	324
12	MR	52	68	16	256
13	MUA	69	83	14	196
14	MI M	62	82	20	400
15	MFM	53	71	18	324
16	NADO	81	88	7	49
17	NRH	78	90	12	144
18	RKI	55	71	16	256
19	SHL	52	70	18	324
20	SIAW	55	72	17	289
21	ULA	78	86	8	64
22	UMH	60	76	16	256
23	VIRS	58	73	15	225
24	WU	42	61	19	361
25	WA	63	76	13	169
N = 25		ΣX1= 1456	ΣX2= 1872	ΣX= 416	ΣX^2= 7670

Table 4.6 above showed the score difference between pre-test and post-test at the experimental class. The difference score was the results from the post-test scores subtract with pre-test score. There was significant difference score between pre-test and post-test at the experimental class, the biggest difference score was 27 and the lowest difference score was 4. It is described by the graphic below:

Graphic 4.1

The difference score between pre-test and post-test of the experimental class



Graphic 4.1 above showed the results of students' pre-test and post-test scores on the criteria in writing narrative text at the experimental class. Data showed the pre-test score, the maximum score was 81, and the minimum score was 34. One student who got the maximum and one student who got the minimum score. For the post-test score, the maximum score was 90 and the minimum score was 46. There is a student who got the maximum score and a student who got the minimum score.

2. Control Class

The writer analyzed the data by comparing students' score in pre-test and post-test at the control class, explaining by the table below:

Table 4.7

The different score between pre-test and post-test at control class

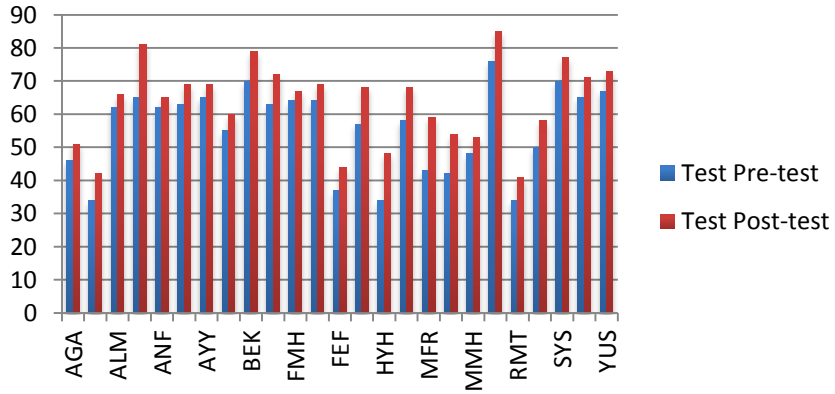
No	Name	Test		Deviation (Y=Y2-Y1)	squarded Deviation (Y2)
		Pre-test	Post-test		
1	AGA	46	51	5	25
2	AHF	34	42	8	64
3	ALM	62	66	4	16
4	ALH	65	81	16	256
5	ANF	62	65	3	9
6	ANFI	63	69	6	36
7	AYY	65	69	4	16
8	AYS	55	60	5	25
9	BEK	70	79	9	81
10	DER	63	72	9	81
11	FMH	64	67	3	9
12	FNH	64	69	5	25
13	FEF	37	44	7	49
14	HRH	57	68	11	121
15	HYH	34	48	14	196
16	HDH	58	68	10	100
17	MFR	43	59	16	256
18	MJM	42	54	12	144

19	MMH	48	53	5	25
20	NAA	76	85	9	81
21	RMT	34	41	7	49
22	SOH	50	58	8	64
23	SYS	70	77	7	49
24	TOEBS	65	71	6	36
25	YUS	67	73	6	36
N = 25		ΣX1= 1394	ΣX2= 1589	ΣX= 195	ΣX^2= 1849

Table 4.7 above showed the score difference between pre-test and post-test at the control class. The difference score was the results from the post-test score subtract pre-test score. There was significant difference scores between pre-test and post-test at the control class, the biggest difference score was 16, and the lowest different score was 3.

Graphic 4.2

The different score between pre-test and post-test of control class



Graphic 4.2 above showed the results of the students' pre-test and post-test scores on the criteria in writing narrative text at the control class. The Data showed in the pre-test score the maximum was 76, and the minimum was 34. There are a student who got the maximum score and three students who got the minimum score. From the post-test score, the maximum score was 85 and the minimum score was 41. One student who got the maximum score and one student who got the minimum score.

3. Statistical Hypothesis Testing

To test the hypothesis the data obtained from both pre-test and post-test are analyzed and calculated by using formula. From the above data is gotten, the writer t-test calculated using steps as follow:

1. Determine mean of score experimental class (MX), with formula:

$$M_X = \frac{\sum X}{N}$$
$$= \frac{416}{25}$$
$$= 16{,}64$$

The result above showed about the average score (mean) of the experimental class. The writer got the data from Σx_1, Σx_2, and $\Sigma x_.$. Afterwards the researcher calculated the data based on the formula above.

2. Determine mean of score control class (MY), with formula:

$$M_Y = \frac{\sum Y}{N}$$
$$= \frac{195}{25}$$
$$= 7{,}8$$

The result above showed about the average score (mean) of the experimental class. The writer got the data from ΣY_1, ΣY_2, and $\Sigma Y_.$. Afterwards the researcher calculated the data based on the formula above.

3. Determine the total square of error in experimental class, with formula:

$$\Sigma x^2 = \Sigma x^2 - \frac{(\Sigma x)^2}{N}$$
$$= 7670 - \frac{(416)^2}{25}$$
$$= 7670 - \frac{173056}{25}$$
$$= 7670 - 6922{,}24$$
$$= 747{,}76$$

The result above showed about the score quadrates at the experimental class. The writer got the data from Σx_1, Σx_2, Σx

and Σx^2. Afterwards she calculated the data based on the formula above.

4. Determine the total square of error in control class, with formula:

$$\Sigma Y^2 = \Sigma Y^2 - \frac{(\Sigma Y)^2}{N}$$

$$= 1849 - \frac{(195)^2}{25}$$

$$= 1849 - \frac{38025}{25}$$

$$= 1849 - 1521$$

$$= 328$$

The result above showed about the score quadrates at the control class. The writer got the data from ΣY_1, ΣY_2, ΣY and ΣY^2. Afterwards she calculated the data based on the formula above.

5. Calculate the T-test

$$t = \frac{M_x - M_y}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{N_x + N_y - 2}\right)\left(\frac{N_x + N_y}{N_x . N_y}\right)}}$$

$$= \frac{16{,}64 - 7{,}8}{\sqrt{\left(\frac{747{,}76 + 328}{25 + 25 - 2}\right)\left(\frac{25 + 25}{25.25}\right)}}$$

$$= \frac{8{,}84}{\sqrt{\left(\frac{1075{,}76}{48}\right)\left(\frac{50}{625}\right)}}$$

$$= \frac{8{,}84}{\sqrt{(22{,}4117)\ (0{,}08)}}$$

$$= \frac{8{,}84}{\sqrt{1{,}79293}}$$

$$= \frac{8{,}84}{1{,}33}$$

$$= \mathbf{6{,}64}$$

6. Determine the t_{table} with significance 5%

   Df $= N_X + N_Y - 2$

   $= 25 + 25 - 2$

   = 48

The result above showed about the score of sample both experiment and control class. The writer used 50 students as a sample for the research. 25 students are from X IPA as experimental class and 25 students are from X IPS as control class.

Comparing "t" has been tasted in calculating (t_o = 6,64) and df (degree of freedom) for 48, the writer used the closer "df" from 50-2 = 48 so df = 48 which has been tested on t-table (t_t = 5% = 1,67 and t_t = 1% =2,40). It can be known that $t_o > t_t$ 5% and t_o > 1% its mean 1,67 <6,64>2,40.

4. Interpretation of the Data

The data showed tha**t** the mean of the pre-test scores obtained by students of X IPA as experimental class was 58,24 and pre-test scores obtained by students of class X IPS as control class was 55,76. The highest score in the two classes was different that was class X IPA as experimental class got 81 and class X IPS as control class got 76. The lowest score of pre-test in both classes was 34 for experiment class and 34 for control class.

The data showed tha**t** the mean of the post-test scores obtained by students of X IPA as experimental class was 74,88 and post-test scores obtained by students of class X IPS as control class was 63,56. The highest score of post-test in class X IPA as experimental class got 90 and class X IPS as control class got 85. The lowest score of post-test in both classes was 46 for experiment class and 42 for control class. The distribution score of experiment class was 90-46=44 , while in control class was 85-42= 43.

Based on df =48 and analyzed by using t-test, the writer tested that there is a better alteration of using Scaffolding in teaching writing in narrative text, because t-count is higher than t-table in

significant 5% and 1%. The table with the significant level of 5% is 1,67 and the significant level of 1% is 2,40.

From the interpretation above, t-count > t-table means there was significance effect of using Scaffolding in teaching writing in narrative text.

Testing hypothesis aims to know the significant of both variables, and tested as follow:

$H_a = t_o > t_t$

$H_o = t_o < t_t$

Notes:

H_a = Alternative Hypothesis

H_o = Null Hypothesis

t_o = the value of t-observation

t_t = the value of t-table

To prove the data hypothesis, the data obtained from an experimental class and control class is calculated by using t-test formula with assumption as follow:

if $t_o > t_t$: the alternative hypothesis is accepted. It mean scaffolding technique is not influence to be better in teaching writing narrative text at first grade of SMA Al Irsyad Waringinkurung.

if $t_o < t_t$: the alternative hypothesis is rejected. It means scaffolding technique is influence to be better in teaching writing narrative text at first grade of SMA Al Irsyad Waringinkurung.

From the result conclusion above, the writer compared both degree of significant 5% and 1% $t_o > t_t$ 5% and $t_o > t_t$ 1%, 1,67<6,64>2,40. It means (alternative hypothesis) of the research is accepted and stated that scaffolding technique is better in teaching writing narrative text then students who aren't use scaffolding technique in teaching writing narrative text.

Meanwhile, based on explanation above shows that the difference treatment makes difference result in experimental class that use scaffolding technique and control class that not used scaffolding technique, it means using scaffolding technique in teaching writing narrative text is more influence than not use scaffolding technique.