CHAPTER IV
RESULT AND DISCUSSION

A. Description of The Data

This chapter presents the results of data analysis which concerned with the effectiveness of using scaffolding technique in teaching writing on descriptive text at seventh grade of MTs MII Cidangiang Pandeglang. The researcher divided them into two classes, 25 students from VII A as experimental class, and 25 students from VII C as control class. The tests were divided into two types; pre-test and post-test. The tests conducted to get the data on students' writing descriptive text skill.

To find out the effectiveness of using scaffolding technique, the researcher identified some result, they are: the score of student before treatment, and the score of student after treatment. After collecting the data, the researcher calculated and analyzed them.

To get the data, the researcher uses test as instrument. The researcher gave the test to students as the sample both at the experimental class and at control class. The test used in this research divided into two types, there are pre-test and post-test, the pre-test is the test that is given before treatment, and the post-test is given after treatment.

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 researcher describes the data at experimental and control class as bellow:

1. Experimental Class

The researcher describes the result of pre-test in the experimental class by the table as follow:

Table 4.1
The Students' score of pre-test at the experimental class

No	Respondents	CRITERIA					Score
		Content	Organization	Vocabulary	Language use	Mechanics	
1	ATB	21	13	11	13	3	61
2	DA	18	13	12	10	2	55
3	ESL	23	14	15	13	3	68
4	EW	15	10	10	9	2	46
5	FI	20	15	14	15	3	67
6	FA	19	15	17	17	3	71
7	FF	23	15	14	13	3	68
8	FN	13	7	7	5	2	34
9	KS	16	15	14	17	3	65
10	MNR	15	10	13	14	2	54
11	MS	14	9	8	7	2	40
12	MAN	20	15	17	15	3	70
13	MZ	13	7	7	5	2	34
14	NF	16	16	14	15	2	63
15	NJ	16	11	10	10	2	49
16	NQ	23	18	17	19	3	80

17	RA	17	10	15	17	2	61
18	SSP	23	14	14	13	3	67
19	SA	17	15	18	15	3	68
20	SNA	23	16	17	19	3	78
21	SNM	15	14	13	13	2	57
22	SS	25	16	15	13	3	72
23	SKN	17	15	15	16	3	66
24	TBZ	14	7	7	5	2	35
25	WNY	20	14	12	13	3	62
N = 25		Total Score					1491
		Average					59.64

Mean of Pre-test:

$X = \frac{\sum X}{N} = \frac{1491}{25} = 59.54$ (the mean of pre-test experimental class is 59.64)

From the *Table 4.1* above, it showed that the result of the students' pre-test scores on the criteria in writing on descriptive text at the experimental class. The data showed that the maximum score was 80 and the minimum score was 34. One student who got the maximum and two students who got the minimum score. The average score of the pre-test was 59.64. While the result of a post-test score at the experimental class got better. It can be described as follow:

Table 4.2
The Students' score of post-test at the experimental class

No	Respondents	CRITERIA					Score
		Content	Organization	Vocabulary	Use Language	Mechanics	
1	ATB	24	17	17	16	4	78
2	DA	19	13	14	14	3	63
3	ESL	25	20	20	17	4	86
4	EW	19	13	15	14	3	64
5	FI	23	18	15	15	3	74
6	FA	25	18	17	17	4	81
7	FF	22	15	17	17	3	74
8	FN	18	16	14	14	3	65
9	KS	19	16	17	15	3	70
10	MNR	20	17	15	11	3	66
11	MS	17	11	10	10	2	50
12	MAN	26	19	20	16	3	84
13	MZ	19	17	15	16	3	70
14	NF	24	19	18	20	3	83
15	NJ	22	18	17	17	4	78
16	NQ	25	19	18	20	4	86
17	RA	19	17	16	17	3	72
18	SSP	19	18	18	17	3	75
19	SA	25	19	19	17	4	84
20	SNA	26	19	20	17	4	86
21	SNM	19	16	17	15	3	70
22	SS	24	20	19	23	4	90

23	SKN	22	17	17	16	3	75
24	TBZ	19	17	15	16	3	70
25	WNY	25	18	17	18	4	82
N = 25		Total Score					1876
		Average					75.04

Mean of Post-test:

$X = \frac{\sum X}{N} = \frac{1876}{25} = 75.04$ (the mean of post-test experimental class is 75.04)

From the table 4.2, it showed that the results of the students' post-test scores on the criteria of writing descriptive text at the experimental class. The data showed that the maximum score was 90, and the minimum score was 50.

Based on the explanation above, it 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 59.64 < 75.04.

To know the result of the test, the researcher makes the table of the students' score for each variable as follow:

Table 4.3
Data from Pre-test and Post-test of Experiment Class

No	Respondent	Pre-test	Post-test
1	ATB	61	78
2	DA	55	63
3	ESL	68	86
4	EW	46	64
5	FI	67	74
6	FA	71	81
7	FF	68	74
8	FN	34	65
9	KS	65	70
10	MNR	54	66
11	MS	40	50
12	MAN	70	84
13	MZ	34	70
14	NF	63	82
15	NJ	49	78
16	NQ	80	86
17	RA	61	72
18	SSP	67	75
19	SA	68	84
20	SNA	78	86
21	SNM	57	70
22	SS	72	90
23	SKN	66	75
24	TBZ	35	70
25	WNY	62	82
N = 25	TOTAL	$\sum X$ = 1491	$\sum X$ = 1876
	AVERAGE	M = 59.64	M = 75.04

From the table 4.3, it showed the difference result of pre-test and post-test at the experimental class. It got the significant improvement after giving treatment using scaffolding technique, it was seen from the average of the post-test better than pre-test 59.64 < 75.04.

2. Control Class

The researcher describes the result of a pre-test in the control class by the table as follow:

Table 4.4
The Students' score of pre-test at the control class

No	Respondents	CRITERIA					Score
		Content	Organization	Vocabulary	Use Language	Mechanics	
1	AN	23	12	13	18	3	69
2	AUT	16	13	10	11	3	53
3	AMH	15	10	14	12	3	54
4	DN	16	10	10	13	3	52
5	FNA	16	13	14	10	3	56
6	IF	14	7	8	8	2	39
7	KD	13	7	7	5	2	34
8	LS	15	14	13	10	4	56
9	MEFR	13	7	7	5	2	34
10	MTAH	25	16	16	18	3	78
11	MHR	15	10	13	10	3	51

12	RA	16	10	10	13	3	52
13	RM	13	7	8	5	2	35
14	RPM	14	8	7	5	2	36
15	RPG	13	10	7	5	2	37
16	RP	17	12	10	13	3	55
17	RAR	18	13	14	15	3	63
18	RDC	14	10	8	8	2	42
19	SA	14	8	8	7	2	39
20	SRM	15	13	14	15	3	60
21	SSR	15	13	11	12	3	54
22	SKD	16	10	10	11	3	50
23	SNK	13	7	7	5	2	34
24	UD	20	15	13	13	3	64
25	YS	21	13	10	14	4	62
N = 25		Total Score					1259
		Average					50.36

Mean of Pre-test:

$X = \frac{\sum X}{N} = \frac{1259}{25} = 50.28$ (the mean of pre-test control class is 50.36)

From the *Table 4.4*, it showed that the results of the students' pre-test scores on the criteria in writing descriptive text at the control class. That the data showed the maximum score was 78, and the minimum score was 34. One student who got the maximum score and three students who got the minimum score. The average of score of the pre-test was

50.36. While the result of a post-test at the control class got better score. It can be described by table bellow:

Table 4.5
The Students' score of post-test at the control class

No	Respondents	CRITERIA					Score
		Content	organization	vocabulary	Use Language	Mechanics	
1	AN	24	15	14	18	4	75
2	AUT	25	16	15	18	4	78
3	AMH	16	15	13	15	3	62
4	DN	17	11	12	15	3	58
5	FNA	22	16	15	13	4	70
6	IF	15	15	10	11	3	54
7	KD	15	11	10	11	3	50
8	LS	17	15	13	15	3	63
9	MEFR	15	7	10	6	2	40
10	MTAH	27	18	15	18	4	82
11	MHR	25	15	14	18	4	76
12	RA	20	13	14	15	3	65
13	RM	15	15	11	14	3	58
14	RPM	17	12	11	14	3	57
15	RPG	20	15	13	18	3	69
16	RP	20	14	12	15	3	64
17	RAR	23	16	15	14	4	72
18	RDC	15	11	10	10	2	48
19	SA	14	10	9	12	2	47

20	SRM	20	14	13	15	3	65
21	SSR	16	13	12	14	3	60
22	SKD	17	12	11	15	3	58
23	SNK	14	10	8	10	2	44
24	UD	27	18	18	18	4	85
25	YS	25	16	15	18	4	78
N = 25		Total Score					1578
		Average					63.12

Mean of Post-test:

$X = \frac{\sum X}{N} = \frac{1578}{25} =$ 63.12 (the mean of post-test control class is 63.12)

From the *Table 4.4*, it showed that the results of the students' post-test scores on the criteria in writing descriptive text at the control class. That the data showed the maximum score was 85 and the minimum score was 40. One student who got the maximum score and one student who got the minimum score. The average score of the post-test was 63.12.

Based on the explanation above, it 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 50.28 < 63.12.

To know the result of the test, the researcher makes the table of the students' score for each variable as follow:

Table 4.6
Data from Pre-test and Post-test of Control Class

No	Respondent	Pre-test	Post-test
1	AN	69	75
2	AUT	53	78
3	AMH	54	62
4	DN	52	58
5	FNA	56	70
6	IF	39	54
7	KD	34	50
8	LS	56	63
9	MEFR	34	40
10	MTAH	78	82
11	MHR	51	76
12	RA	52	65
13	RM	35	58
14	RPM	36	57
15	RPG	37	69
16	RP	55	64
17	RAR	63	72
18	RDC	42	48
19	SA	39	47
20	SRM	60	65
21	SSR	54	60
22	SKD	50	58
23	SNK	34	44
24	UD	64	85
25	YS	62	78
N = 25	TOTAL	$\sum X$ =1259	$\sum X$ = 1578
	AVERAGE	M = 50.36	M = 63.12

From the table 4.6, it showed the difference result of pre-test and post-test at the control class got the significant improvement, it was seen from the average of the post-test got better than the pre-test 50.36 < 63.12.

B. Analysis of The Data

1. Experimental Class

The researcher analysis the data by comparing students' score in pre-test and post-test in the experimental class. The students' improvement score caused the researcher used scaffolding technique in teaching writing on descriptive text. It seen from the students improvement score, it means that used scaffolding technique was success in improving students' writing skill. The researcher describes the students' improvement score of pre-test and post-test at the experimental class by the table below:

Table 4.7
The difference score between pre-test and post-test result of experimental class

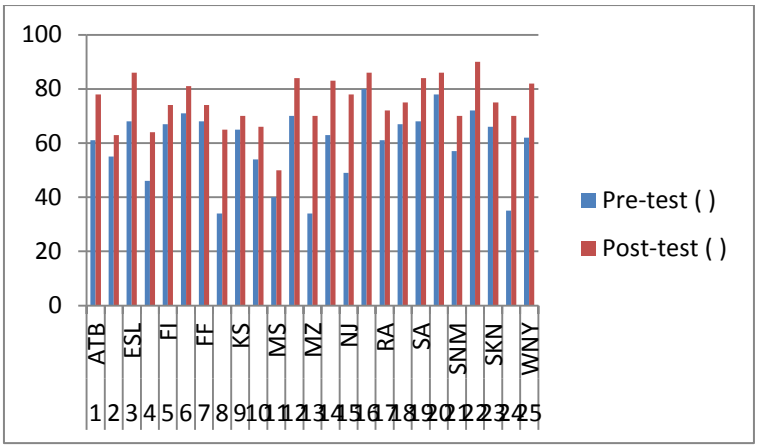
No	Respondent	Pre-test (X_1)	Post-test (X_2)	Difference ($X_2 - X_1$)
1	ATB	61	78	17
2	DA	55	63	8
3	ESL	68	86	18

4	EW	46	64	18
5	FI	67	74	7
6	FA	71	81	10
7	FF	68	74	6
8	FN	34	65	31
9	KS	65	70	5
10	MNR	54	66	12
11	MS	40	50	10
12	MAN	70	84	14
13	MZ	34	70	36
14	NF	63	83	20
15	NJ	49	78	29
16	NQ	80	86	6
17	RA	61	72	11
18	SSP	67	75	8
19	SA	68	84	16
20	SNA	78	86	8
21	SNM	57	70	13
22	SS	72	90	18
23	SKN	66	75	9
24	TBZ	35	70	35
25	WNY	62	82	20
N=25	TOTAL	$\sum X$ = 1491	$\sum X$ = 1876	$\sum$ = 385
	AVERAGE	M = 59.64	M = 75.04	

From the table 4.7 above, it showed that there was difference score between pre-test and post-test at the experimental class. The difference score was the result from the post-test scores reduced pre-test score. There was significant difference score between pre-test and post-test at the

experimental class by the higgest score was 36 and the lowest was 5. The graphic describes the table as follow:

Graphic 4.1
The difference score between pre-test and post-test of experimental class



From graphic 4.1 above, it showed the results of the students' pre-test and post-test scores on the criteria of writing in the experimental class. Data showed that the maximum score in pre-test was 80 and the minimum score was 34. While in post-test the maximum score was 90 and the minimum score was 50.

2. Control Class

The researcher analysis the data by comparing students' score in pre-test and post-test at the control class. This result describes by the table below:

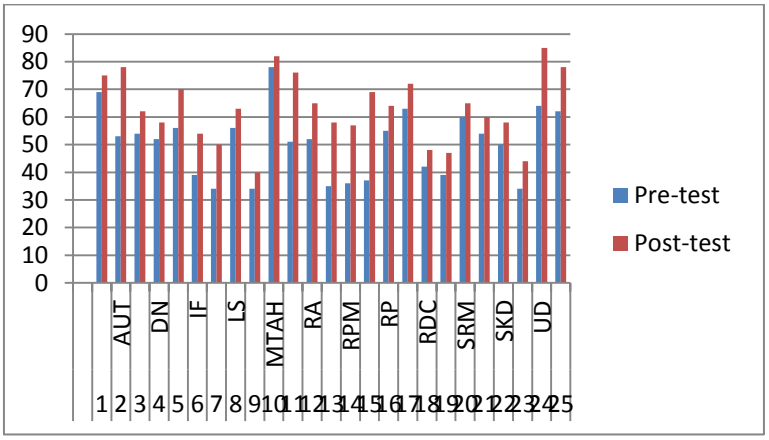
Table 4.8
The difference score between pre-test and post-test result of control class

No	Respondent	Pre-test (X_1)	Post-test (X_2)	Difference ($X_2 - X_1$)
1	AN	69	75	6
2	AUT	53	78	25
3	AMH	54	62	8
4	DN	52	58	6
5	FNA	56	70	14
6	IF	39	54	15
7	KD	34	50	16
8	LS	56	63	7
9	MEFR	34	40	6
10	MTAH	78	82	4
11	MHR	51	76	25
12	RA	52	65	13
13	RM	35	58	23
14	RPM	36	57	21
15	RPG	37	69	32
16	RP	55	64	9
17	RAR	63	72	9
18	RDC	42	48	6
19	SA	39	47	8
20	SRM	60	65	5
21	SSR	54	60	6
22	SKD	50	58	8
23	SNK	34	44	10

24	UD	64	85	21
25	YS	62	78	16
N=25	TOTAL	$\sum X$ = 1259	$\sum X$ = 1578	$\sum$ = 319
	AVERAGE	M = 50.36	M = 63.12	

From the table 4.8, it showed that the difference score between pre-test and post-test at the control class. The difference score was the result from the post-test scores reduced pre-test score. There was significant difference score between pre-test and post-test at the control class by the highest score was 32 and the lowest was 4. The graphic describes the table as follow:

Graphic 4.2
The different score between pre-test and post-test of control class



From graphic 4.2 above, it showed the results of the students' pre-test and post-test scores on the criteria of writing

in the control class. Data showed that the maximum score in pre-test was 78 and the minimum score was 34. While in post-test the maximum score was 85 and the minimum score was 40. After getting the data from score of two classes, then the researcher analyzed it by using *t-Test*. The formula as follow :

$$t_0 = \frac{M_1 - M_2}{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right)\left(\frac{N_1 + N_2}{N_1 \,.\, N_2}\right)}$$

Notes :

t_0 = t observation

M_1 = Mean score of the experiment class

M_2 = Mean score of the control class

$\sum x_1^2$ = Sum of square deviation score in experiment class

$\sum x_2^2$ = Sum of square deviation score in control class

N_1 = Number of students of experiment class

N_2 = Number of students of control class

2 = Constant number

df = Degree of Freedom (df = $N_1 + N_2 - 2$)

Table 4.9
The result calculation of post-test at the experimental class (X_1^2) and the control class (X_2^2)

No	X_1	X_2	x_1	x_2	x_1^2	x_2^2
1	78	75	2.96	11.88	8.7616	141.1344
2	63	78	-12.04	14.88	144.9616	221.4144
3	86	62	10.96	-1.12	120.1216	1.2544
4	64	58	-11.04	-5.12	121.8816	26.2144
5	74	70	-1.04	6.88	1.0816	47.3344
6	81	54	5.96	-9.12	35.5216	83.1744
7	74	50	-1.04	-13.12	1.0816	172.1344
8	65	63	-10.04	-0.12	100.8016	0.0144
9	70	40	-5.04	-23.12	25.4016	534.5344
10	66	82	-9.04	18.88	81.7216	356.4544
11	50	76	-25.04	12.88	627.0016	165.8944
12	84	65	8.96	1.88	80.2816	3.5344
13	70	58	-5.04	-5.12	25.4016	26.2144
14	83	57	7.96	-6.12	63.3616	37.4544
15	78	69	2.96	5.88	8.7616	34.5744
16	86	64	10.96	0.88	120.1216	0.7744
17	72	72	-3.04	8.88	9.2416	78.8544
18	75	48	-0.04	-15.12	0.0016	228.6144
19	84	47	8.96	-16.12	80.2816	259.8544
20	86	65	10.96	1.88	120.1216	3.5344
21	70	60	-5.04	-3.12	25.4016	9.7344
22	90	58	14.96	-5.12	223.8016	26.2144
23	75	44	-0.04	-19.12	0.0016	365.5744
24	70	85	-5.04	21.88	25.4016	478.7344
25	82	78	6.96	14.88	48.4416	221.4144
$\sum$	1876	1578			2098.96	3524.96

Note :

X_1 = Score Post-test (Experimental Class)

X_2 = Score Post-test (Control Class)

x_1 = X_1 - M_1(Mean X_1)

x_2 = X_2 - M_2 (Mean X_2)

x_1^2 = The Squared Value of x_1

x_2^2 = The Squared Value of x_2

From the table above, the researcher got the data $\sum X_1$ = 1876, $\sum X_2$ = 1578, $\sum x_1^2$ = 2098.96, $\sum x_2^2$ = 3524.96 where as N_1 = 25 and N_2 = 25. After that the researcher calculated them based on the t-test formula, the steps as follow :

1. Determine mean of variable X_1 and X_2

   Variable X_1 $M_1 = \frac{\sum x_1}{N_1} = \frac{1876}{25}$ = 75.04

   Variable X_2 $M_2 = \frac{\sum x_2}{N_2} = \frac{1578}{25}$ = 63.12

2. Determine *t-Test*

   $\sum x_1^2$ = 2098.96

   $\sum x_2^2$ = 3524.96

   df = $N_1 + N_2 - 2$ = 25 + 25 – 2 = 48

$$t_o = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right)\left(\frac{N_1 + N_2}{N_1 \,.\, N_2}\right)}}$$

$$= \frac{75{,}04 - 63{,}12}{\sqrt{\left(\frac{2098{,}96 + 3524{,}96}{25+25-2}\right)\left(\frac{25+25}{25 \,.\, 25}\right)}}$$

$$= \frac{11,92}{\sqrt{\left(\frac{5623,92}{48}\right)\left(\frac{50}{625}\right)}}$$

$$= \frac{11.92}{\sqrt{117,165 \times 0,08}}$$

$$= \frac{11,92}{\sqrt{9,3732}} = \frac{11,92}{3,06} = 3.89$$

So after the researcher calculates this data based on the formula *t-Test*, the obtained t_o or $t_{observation}$ was 3,89.

C. Hypothesis Testing

The data obtained from experiment class and control class were calculated with the assumption as follow :

If $t_0 > t_t$: the alternative hypothesis was accepted. It means there was significant effect of teaching writing using scaffolding technique than without using scaffolding technique. If $t_0 < t_t$: null hypothesis was rejected. It means there was no significant effect of teaching writing using scaffolding technique than without it.

From the result of calculation above, it is obtained that the value of t_o ($t_{observation}$) was 3.89, the degree of freedom (df) = 48. In the degree significance 5% = 1,67 in degree of significance 1% = 2,40. After that the researcher compared the data with t_t (t table) both in degree significance 5% and 1%. Therefore $t_o : t_t$ = 3,89 > 1,67 in degree of significance 5% and $t_o : t_t$ = 3,89 > 2,40 in degree significance 1%.

The statistic hypothesis states that if t_o is higher than t_t, it shows that H_a(alternative hypothesis) of the result is accepted and H_o(null hypothesis) is rejected. It means that there was an effect of teaching writing using scaffolding technique.

From the result above, the researcher give conclusion that it means there is a significant effectiveness of scaffolding technique on students' writing ability. It can be seen that the student score got better by scaffolding technique. This could be seen after comparing the score of pre-test (before using scaffolding technique) and post-test (after using scaffolding technique).

D. Interpretation of The Data

Based on the finding data of the research, the implementation of scaffolding technique in teaching writing on descriptive text was found that the students taught by this technique have been improved than the students taught without using scaffolding technique. The students taught by this technique became more active in the class because they studied by cooperative and they must share their idea to their friend. It can help the students to have the knowledge and skills to be able to write their own texts.

From the result of the research that the mean of pre-test score obtained by students of MTs MII Cidangiang Pandeglang in the class VII A (experimental class) 59,64 was greater than class VII C (control class) 50,36. The highest score of pre-test

in VII A (experimental class) was 80 and in the class VII C (control class) was 78. The lowest score of pre-test in class VII A (experimental class) was 34 and in the class VII C (control class) was 34. It means that the distribution of score pre-test in experimental class was greater than control class.

The mean of post-test score in experimental class was 75,04 was greater than in control class was 63.12. The highest score in experimental class was 90 and in control class was 85. The lowest score in experimental class was 50 and in control class was 40. It means that the distribution of score post-test in experimental class was greater than control class. It can be seen in teaching process as follow :

1. In the experimental class

   When the teacher taught writing using scaffolding technique, it made students more active because they work on the group and students also can discuss with their friend to share their idea in the classroom. Scaffolding technique help students t have the knowledge and skills to be able to write their own texts because they have developed background knowledge about the subject, the generic structure of text, are aware of the linguistic characteristics of the genre, and have jointly constructed a similar text before they write their own texts. As students write, remind them about the process of writing: doing a first draft, self-editing,

discussing the draft with friends and later with the teacher, and finally producing a text.[1]

2. In the control class

When the teacher taught in control class, the teacher only explains the material without using scaffolding technique, the students were less interested. They got bored and they fell confused when the teacher asked them to write the text.

[1] Pauline Gibbons, *(Scaffolding Language; Scaffolding Learning Second edition)* Heineman Portsmouth, NH. 2015. p.121

CHAPTER V

CLOSING

A. Conclusion

Based on the writer finding that was presented in the previous chapter the researcher would like to give some conclusions as follow :

1. Refers to the first statement of problem that is "*How is the student's ability in writing descriptive text at the seventh grade of MTs MII Cidangiang Pandeglang*?". From the result of the pre-test and post-test between experimental class and control class, the researcher can conclude that before giving treatment, the score of students' writing descriptive text were low and it increased after giving the treatment. The score of experimental class is better than score of control class. It can be shown from the result of data analysis that mean of control class is 63,12 and the mean of experiment class is 75.04 after giving treatment. It means that the mean of experiment class is good category.
2. Refers to the second statement of problem that is *"How is the effectiveness of scaffolding technique in teaching writing on descriptive text at the seventh grade of MTs MII Cidangiang Pandeglang?"*. The statement could be answered based on the research analysis, it was known that according to the data, the value of $t_{observation}$ is bigger than

t_{table} . $t_{observation}$ = 3,89 > t_{table} = 1,67 (5%) or $t_{observation}$ 3,89 > t_{table} = 2,40 (1%), so H_o is rejected and H_a is accepted. It means that scaffolding technique had significant effect in students' learning writing descriptive text.

B. Suggestion

Dealing with the conclusion of the research, the researcher would like to give some suggestion as follow:

a. For the Teacher

1. The teacher should be creative in developing English learning process in the classroom in order to make student more interested in learning English and mastery the material well.
2. Because writing is a process that not gained by a short period, it needs a long time journey to finish the writing. Then, do not forget to construct a prior knowledge before asking the students to fulfill their tasks.
3. To increase students' descriptive text, the teacher should be more attention towards students' need and students' ability in English learning in the classroom, and the teacher should be use method or approach in learning process to make student comfortable, enjoy, and more interest in learning writing descriptive text.

b. For the Students

1. The students have more spirit and more active by use the vtechnique because they can learn by cooperative.
2. The students should memorize vocabularies, it is useful to help students in writing descriptive text.

c. For the Further Researcher

For further researcher, the researcher hopes they can try to apply scaffolding technique in different skill of English language and choose the appropriate material or make other teaching technique that can be applied by teachers and conduct the research better.