# CHAPTER IV FINDING AND DISSCUSSIONS

# A. Findings

Having taken and analyzed the data, the researcher will present the result of this study in this subchapter. Basically, the main objective of this study is to examine the effectivenss of using STAD in teaching speaking. In following lines, the researcher will elaborates the result of this study.

### 1. Students speaking skill before treatment

In the first research question, the researcher wants to present the description of data of pre-test from both classes. The pre-test was carried out in the beginning of research activities in order to gain valid information regarding to the initial students' speaking skill. The following line will be shown the result of pre-test from experimenatl and control class.

As the writer explained in the previous chapter that the population in this research were 60 students of the eleventh grade in Madrasah Tsanawiyah Daarul Falah Serang-Kopo and the sample were 30 students of VIII A as experimental class and 30 students of VIII B as control class.

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In this research, the writer did an analyze of quantitative data. The data is obtained by giving test to the experimental class and control class. The test divided two types they are pre-test and post-test. Pre-test was given before treatment and post-test was given after treatment. On the test, students should make procedure text according to the instructions on the paper.

## Table 4.1

Students' Score pre-test (X1) and pre-test (X2)

No	Participant	Experiment	Control
1	Student 1	34	47
2	Student 2	34	52
3	Student 3	48	44
4	Student 4	50	43
5	Student 5	27	54
6	Student 6	51	44
7	Student 7	42	44
8	Student 8	44	44
9	Student 9	34	33
10	Student 10	34	27
11	Student 11	34	25
12	Student 12	34	35
13	Student 13	36	41
14	Student 14	35	17
15	Student 15	36	21
16	Student 16	46	52
17	Student 17	42	28
18	Student 18	49	44
19	Student 19	38	40

20	Student 20	34	25
21	Student 21	48	25
22	Student 22	42	38
23	Student 23	45	35
24	Student 24	42	52
25	Student 25	42	40
26	Student 26	44	41
27	Student 27	34	35
28	Student 28	42	38
29	Student 29	36	35
30	Student 30	48	35
	Σ	1205	1134
Av	verage	40.16	37,8

The table above shows about the students' pre-test score at the experimental and control class. The highest score of pre-test at the experimental class is 51, it is gotten by one student and the lowest score of pre-test at the experimental class is 34, it is gotten by one 6 student and average score of pre-test is 40.16.

The result of pre-test at control class is highest score than score at experiment class. The data shows that the highest score of pre-test at the control class is 54, it is gotten by one student and the lowest score of pre-test at the control class is 17, it is gotten by one student and the average score of pre-test is 37,8.

## 2. Implementation

The implementation of this research, the researcher STAD while teaching in class. Using STAD mean is students are divided into groups or teams which they carry out assigned work. in experimental class the researcher using STAD and in class control the researcher teaching in same way as usual as teacher teaching in the class.

In teaching experimental class the students are divided into groups or teams which they carry out assigned work. In the STAD consist of 4 until 5 students which in each group have different ethnic, performance level, and etc. In this method student will work with their team or group and make sure that all members are understand about the material. The next, their comprehension or ability will exercise by individual quiz about the material.

The obstacles of this method is the teacher should divided group be proportional group. Because the main of this method is take their (students) into conducive group.

## 3. How is students speaking skill after treatment

In the second research question, the researcher wants to present the description of data of post-test from both classes. The post-test was carried out in the ending of research activities in order to gain valid information regarding to the initial students' ability in speaking. The following line will be shown the result of post-test from experimental and control class.

The writer identified some result to find out the effect of STAD in speaking skill. They are the score of students before treatment, the score students after treatment and the differences between pre-test and posttest score of students. The writer describes the data in experimental and control class as follow:

	Table 4.2	
Students'	Score of post-test (X1) and	d post-test
	(X2)	

		Experiment	Control
No	Participants	Class	Class
1	Student 1	75	69
2	Student 2	75	77
3	Student 3	83	68
4	Student 4	85	73
5	Student 5	77	76
6	Student 6	84	64
7	Student 7	70	65

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8	Student 8	83	64
9	Student 9	83	56
10	Student 10	74	50
11	Student 11	75	56
12	Student 12	75	58
13	Student 13	75	65
14	Student 14	70	50
15	Student 15	70	53
16	Student 16	85	69
17	Student 17	83	58
18	Student 18	74	58
19	Student 19	74	68
20	Student 20	75	64
21	Student 21	74	76
22	Student 22	81	68
23	Student 23	82	65
24	Student 24	75	76
25	Student 25	83	68
26	Student 26	70	65
27	Student 27	74	60
28	Student 28	75	64
29	Student 29	75	65
30	Student 30	74	60
	Σ	2308	1928
	Average Score	76.93	64,26

The table above shows about the students' posttest score at the experimental and control class. The highest score of post-test at the experimental class is 85, it is gotten by three student and the lowest score of posttest at the experimental class is 70, it is gotten by one student and average score of post-test is 76,93.

The result of post-test at control class is lowest score than score at experiment class. The data shows that the highest score of post-test at the control class is 73, it is gotten by one student and the lowest score of post-test at the control class is 53, it is gotten by one student and the average score of post-test is 64,26.

However, from two classes it can be seen there were 30 students from experimental class and 30 students from control class who obtained score below the minimum compleness criteria which had been determined by the English students, that is 60.

## Normality test

Normality test is used to show that the sample data come from populations which have normal distribution. In this study the writer used lilliefors method to test normality data of post-test from experiment and control group. The below table illutrates the result of normality test as follows:

From the data above, it can be made an assistant table to find out standard deviation as follows:

NO	X	F	FX	X1	X1 <sup>2</sup>	FX <sup>2</sup>
1	70	5	350	-6.5	42.25	211.25
2	74	6	444	-2.5	6.25	37.5
3	75	9	675	-1.5	2.25	20.25
4	77	1	77	0,5	0,25	0.25
5	81	1	81	4.5	20.25	20.25
6	82	1	82	5.5	30.25	30.25
7	83	4	332	6.5	42.25	169
8	84	1	84	7.5	56.25	56.25
9	85	2	170	8.5	72.25	144.5
	TOTAL	30	2295			689.5
	П	76.5				
	SD	4.7				

Table 4.3Assistant table for Experiment Group

Determining mean of experimental group (X1) by using formula as follows:

$$\bar{x} = \frac{\Sigma F X}{\Sigma F}$$
$$\bar{x} = \frac{2295}{30} = 76,5$$

Counting standard deviation of experiment group (X1) by using formula as follows:

$$SD = \sqrt{\frac{\Sigma F X^2}{\Sigma F}}$$
$$SD = \sqrt{\frac{689,5}{30}}$$
$$SD = \sqrt{22,98} = 4,7$$

Furthermore, the data above are used to test of normality by using Lilliefors method as follows:

		Z	F(Z)	S	(F(Z) – S
NO	<b>X1</b>			(Z)	( <b>Z</b> )
	70	-	0.0838	0.03	-
1		1.38			0.0538
	70	-	0.0838	0.06	-
2		1.38			0.0238
	70	-	0.0838	0.1	-
3		1.38			0.0162
	70	-	0.0838	0.13	-
4		1.38			0.0462
	70	-	0.0838	0.16	-
5		1.38			0.0762
	74	-	0.2981	0.2	0.0981
6		0.53			
	74	-	0.2981	0.23	0.0681
7		0.53			
	74	-	0.2981	0.26	0.0381
8		0.53			
	74	-	0.2981	0.3	-
9		0.53			0.0019
	74	-	0.2981	0.33	-
10		0.53			0.0319
	74	-	0.2981	0.36	-
11		0.53			0.0619
	75	-	0.3783	0.4	-
12		0.31			0.0217
	75	-	0.3783	0.43	-
13		0.31			0.0517
	75	-	0.3783	0.46	-
14		0.31			0.0817

Table 4.4Normality Test of Experiment Group

			0.0500	0.7	
	75	-	0.3783	0.5	-
15		0.31			0.1217
	75	-	0.3783	0.53	-
16		0.31			0.1517
	75	-	0.3783	0.56	-
17		0.31			0.1817
	75	-	0.3783	0.6	-
18		0.31			0.2217
	75	-	0.3783	0.3	-
19		0.31			0.2517
	75	-	0.3783	0.66	-
20		0.31			0.2817
	77	0.10	0.4602	0.7	-
21					0.2398
	81	0.95	0.1711	0.73	-
22					0.5589
	82	1.17	0.121	0.76	-0.639
23					
	83	1.38	0.0838	0.8	-
24					0.7162
	83	1.38	0.0838	0.83	-
25					0.7462
	83	1.38	0.0838	0.86	-
26					0.7762
	83	1.38	0.0838	0.9	-0.062
27					
	84	1.59	0.0606	0.93	-
28					0.8694
	85	1.80	0.0459	0.96	-
29					0.9141
	85	1.80	0.0459	1	-
30					0.9541

Determining Z score by using formula as follows:

$$Z = \frac{X1 - \bar{x}}{SD}$$

$$Z = \frac{70 - 76,5}{4,7} = -1,38$$

From the result above , it can be conclude that mean score is 76.5 and standard deviation is 4.7. Moreover, based on assistant table showed that the  $L_0$  score ( - 0,1517 ) <  $L_t$  (0.161). it means that the sample data of experiment class has normal distribution and can be used for research data.

In addition, the table below shows the calculation of normality test from control class as follows :

-						
NO	Х	F	FX	X1	X1 <sup>2</sup>	FX <sup>2</sup>
1	50	2	100	-13.3	176.89	353.78
2	53	2	106	-10.3	106.09	212.18
3	55	1	55	-8.3	68.89	68.89
4	56	2	112	-7.3	53.29	106.58
5	58	3	174	-5.3	28.09	84.27
6	60	2	120	-3.3	10.89	32.67

Table 4.5Asistent Table for Control class

7	64	3	192	0.7	0.49	1.47
8	65	5	325	1.7	2.89	14.45
9	68	3	204	4.7	22.09	66.27
10	69	2	138	5.7	32.49	64.98
11	73	2	146	9.7	94.09	188.18
12	76	2	152	12.7	161.29	322.58
13	77	1	77	13.7	187.69	187.69
	TOTAL		1901			1703.99
	П		63.3			
	SD		7.5			

a. Having obtained the data more over the researcher determined mean of control class by using formula as follows::

$$\overline{X} = \frac{\sum X}{\sum F}$$
$$\overline{X} = \frac{1901}{30} = 63.3$$

b. Next, the researcher determined standard deviation of control class by using formula as follows:

$$SD = \sqrt{\frac{\sum Fx^2}{\sum F}}$$

$$SD = \sqrt{\frac{1703.99}{30}}$$
  
 $SD = \sqrt{56.79} = 7.5$ 

Having obtained mean score and standard of deviation the researcher test normality of the data to make the researcher easy to analyse and to interpret the data.

Furthermore, the data above used to test of normality test by using Lillifors method as follow:

# Table 4.6

**Normality Test of Control class** 

		Z	F(Z)	S	(F(Z) –
NO	X1			( <b>Z</b> )	<b>S</b> ( <b>Z</b> )
	50	-	0.0384	0.03	-0.0084
1		1.77			
	50	-	0.0384	0.06	-0.0216
2		1.77			
	53	-	0.0853	0.1	-0.0147
3		1.37			
	53	-	0.0853	0.13	-0.0447
4		1.37			
	55	-	0.1587	0.16	-0.0013
5		1.10			
	56	-	0.166	0.2	-0.034
6		0.97			
	56	-	0.166	0.23	-0.064
7		0.97			
	58	-	0.242	0.26	-0.018
8		0.70			
	58	-	0.242	0.3	-0.058
9		0.70			
	58	-	0.242	0.33	-0.088

10		0.70			
	60	-	0.33	0.36	-0.03
11		0.44			
	60	-	0.33	0.4	-0.07
12		0.44			
	64		0.4641	0.43	-0.0341
13		0.09			
	64		0.4641	0.46	-0.0041
14		0.09			
	64		0.4641	0.5	-0.0359
15		0.09			
	65		0.4219	0.53	-0.1081
16		0.22			
	65		0.4219	0.56	-0.1381
17		0.22			
	65		0.4219	0.6	-0.1781
18		0.22			
	65		0.4219	0.3	0.1219
19		0.22			
	65		0.4219	0.66	-0.2381
20		0.22			
	68		0.2676	0.7	-0.4324
21		0.62			
	68		0.2676	0.73	-0.4624
22		0.62			
	68		0.2676	0.76	-0.4924
23		0.62			
	69		0.2236	0.8	-0.5764
24		0.76			
	69		0.2236	0.83	-0.6064
25		0.76			
	73		0.0985	0.86	-0.7615
26		1.29			
	73		0.0985	0.9	-0.8015
27		1.29			
	76		0.0455	0.93	-0.8845
28		1.69			

	76		0.0455	0.96	-0.9145
29		1.69			
	77		0.0344	1	-0.9656
30		1.82			

Determining Z score by using formula as follows :

$$Z = \frac{X1 - \overline{X}}{SD}$$
$$Z = \frac{50 - 63.3}{7.5} = -1.77$$

From the result above , it can be conclude that mean score is 63.3 and standard deviation is 7.5. Moreover, based on assistant table showed that the  $L_0$  score (-0.1081 ) <  $L_t$  (0.161). it means that the sample data of control class has normal distribution and can be used for research data.

Next, The researcher made additional table calculation from experimental class and Control class as follows

#### Table 4.7

The Calculation Scores of Experiment and Control Class

NO	X1			X2	$X1^2$	$X2^2$
		X2	X1			
1	75	69	-	5.7	2.25	32.49
-		0,2	1.5			
2	75	77	-	13.7	2.25	187.69
2	15		1.5			

3	83	68	6.5	4.7	4.25.	22.09
4	85	73	8 5	9.7	72.25	94.09
5	77	76	0.5	12.7	0.25	161.29
6	84	64	7.6	0.7	56.25	0.49
7	70	65	- 6.5	1,7	42.25	2.89
8	83	64	6.5	0.7	42.25	0.49
9	83	56	- 6.5	-7.3	42.25	53.29
10	74	50	- 2.5	13.7	6.25	187.69
11	75	56	- 1.5	-7.3	2.25	53.29
12	75	58	- 1.5	-5.3	2.25	28.09
13	75	65	- 1.5	1,7	2.25	2.89
14	70	50	- 6.5	13.7	42.25	187.69
15	70	53	- 6.5	-10.3	42.25	106.09
16	85	69	- 8.5	5.7	72.25	32.49
17	83	58	6.5	-5.3	42.25	28.09
18	74	58	- 2.5	-5.3	42.25	28.09
19	74	68	2.5	4.7	42.25	22.09
20	75	64	- 1.5	0.7	2.25	0.49
21	74	76	-	12.7	6.25	161.29

			2.5			
22	81	68	4.5	4.7	20.25	22.09
23	82	65	5.5	1,7	30.25	2.89
24	75	76	1.5	12.7	2.25	161.29
25	83	68	6.5	4.7	42.25	22.09
26	70	65	- 6.5	1,7	42.25	2.89
27	74	60	- 2.5	-3.3	6.25	10.89
28	75	64	- 1.5	0.7	2.25	0.49
29	75	65	- 1.5	1,7	2.25	2.89
30	74	60	- 2.5	-3.3	6.25	10.89
	$\Sigma X1 =$	ΣX2 =	$\Sigma X_1 = -$	$\Sigma X_2 =$	$\Sigma X_1^2 =$	$\Sigma X_2^2 =$
	2295	1901	4	81.6	719.25	1629.5

From the table above, the researcher obtained data as follows  $\Sigma X1 = 2295$ ,  $\Sigma X2 = 1901$ ,  $\Sigma X_1^2 = 719.25$ , and  $\Sigma X_2^2 = 1629.5$ . Moreover, the researcher compare the result of post-test from both group by using t-test formula as follows:

$M_1 - M_2$
$\sqrt{\left\{\frac{\sum X_1^2 + \sum X_2^2}{N_2 + N_2 - 2}\right\}\left\{\frac{N_1 + N_2}{N_1 \cdot N_2}\right\}}$
76.5 - 63.3
$t_0 = \frac{1}{\sqrt{\left\{\frac{719.25 + 1629.5}{30 + 30 - 2}\right\}\left\{\frac{30 + 30}{30.30}\right\}}}$

$$t_0 = \frac{13.2}{\sqrt{\{40.95\}\{0.06\}}}$$
$$t_0 = \frac{13.2}{\sqrt{2.45}}$$
$$t_0 = \frac{13.2}{1.56} = 8.46$$

#### **B.** Discussion

After conducting preliminary research, pre-test, treatment, post-test, and t-test. Finally, the writer draws conclusion based on research problems as follows:

Based on the result of post-test from both classes, the researcher obtained some data that students' who can reach the minimum completeness criteria is 2 students from experiment class and 0 from control class. it was influenced by some factors such as 1) some students lacked of confidence in speaking practice, 2)Some students were not able to deliver their ideas in English well, 3)The students were bored with conventional method in speaking learning.

In teaching the researcher teaching in two classes, the first class is as a experiment class which use STAD and class which did not use STAD is a control class. the first time the researcher give the student pre-test and after that the researcher give them treatment (experiment class) after doing treatment the researcher give them post-test to know the score before and after giving the treatment. The positive responds from the students is students can learn English from their friends rather than asking the teacher because they are shy or afraid to ask. beside that the negative respond is the teacher less active in class because the student more active when learning process then teacher. Suggestions for other teacher if they want to use this technique is mastered any situation that can be happen at any time whether good or bad the teacher must be able to control the environment of the class.

based on the result of t-test, the researcher obtained some data, the mean of experiment group is 76,93 and the mean of control group is 64.26. besides the value of t-test is 8,46 and t-table is 1.67. moreover, the writer compared tt with t0 on degree of significance 5% and the result showed that t-test bigger than t-table, tt > t0 or 8,46 > 1.67. in brief, from t-test, it can draw a conclusion that Ha or alternative hypothesis is accepted. Meanwhile, H0 or null hypothesis is rejected. In other words, we can be inferred that there is significant difference between group which use STAD and group which did not use STAD.