CHAPTER IV
THE RESULT OF THE STUDY

A. The Descriptive of Data

To find out how the effectiveness of teaching speaking ability by using pair work techniques, the writer conducted field research.

The reseach was held in SMAN 1 Baros on Agustus 12th 2018, and it was done at grade of first, that is X IPS 4 as experimental class and X IPS 1 as control class. The writer did an analyze of quantitative data. The data was obtained by giving a test to the experimental class and control class. The test is divided into two types are pre-test and post test. Pre-test was given before treatment and post-test was given after treatment. Both of the tests, the writer asked students to improvised a conversation the topic which is given by writer in pre test and improvised a conversation other topic in post test. After giving the pre test and post test, the writer obtained the data of students' pre test and post test score. The result of the tests was presented below:

Table 4.1

The score of pre test and post test in experiment class

No	Name	Pre Test	Post Test
1	AR	40	69
2	ATK	55	74
3	ARI	34	59
4	AA	53	72
5	AS	42	76
6	ATM	40	61

7	DC	23	70
8	EN	37	63
9	EY	36	65
10	FA	42	69
11	HI	29	59
12	IY	36	75
13	IH	44	72
14	IS	52	65
15	MTH	37	66
16	MH	31	69
17	MS	55	76
18	MTM	30	69
19	MAA	40	74
20	NU	49	76
21	RAM	59	73
22	RF	38	69
23	SA	39	69
24	SAH	38	65
25	SRA	46	59
26	SHI	46	76
27	SRO	42	76
28	SR	34	75
29	NUR	55	69

30	MR	37	59
31	ADA	44	82
32	MF	38	65
$\sum X$	TOTAL	1321	2216
M	AVERAGE	41.28125	69.25

$$M_1 \quad = \frac{\sum X_1}{N_1} \qquad\qquad M_2 \quad = \frac{\sum X_2}{N_2}$$

$$= \frac{2216}{32} \qquad\qquad\qquad = \frac{1321}{32}$$

$$= 69.2 \qquad\qquad\qquad\qquad = 41.2$$

Note: M_1 = mean

X_1 = Students' score (pre test)

X_2 = Students' score (post test)

N = Member of students

Base on the calculation on the table 4.1 of pre test and post test assessment at experimental class, it shows that the cumulative value of assessment result before applying pair work technique is 1321. The average of the pre test is 41.2. Meanwhile the cumulative of assessment result after applying pair work technique is 2216 . The average of the post test is 69.2.

Determine mean by formula:

$$M \quad = M1 - M2$$

$$= 69.2 - 41.2$$

$$= 28$$

Note: M = Mean

M1 = Mean of post test

M2 = Mean of pre test

From the calculation of determine mean above, we have know that the average score of pre test and post test (at exp class) increase in amount of 28.

The researcher described the students improving score of pre-test and post- test at the experimental class by the graphic as follow:

Graphic 4.1

The Test of Pre-Test And Post-Test in Experiment Class.
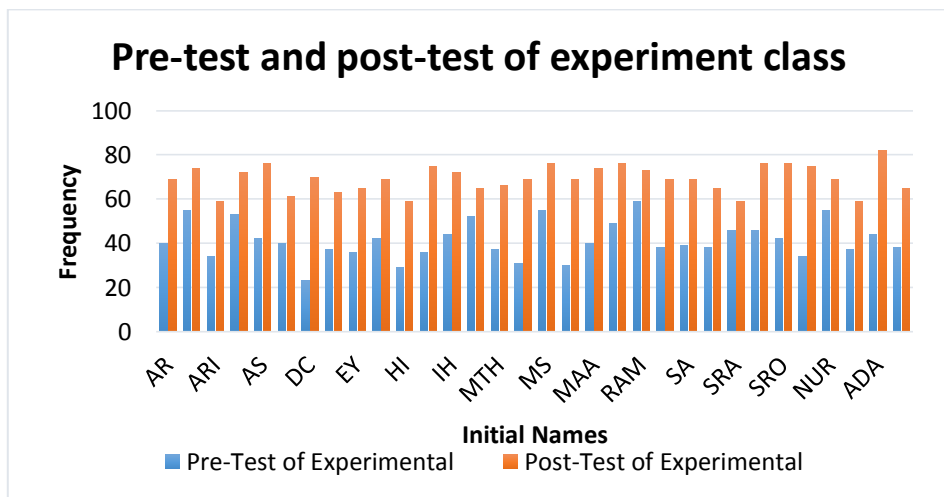
From the graph above, shows the comparison between the score of pre-test and post test in class experiments. Based on the results of the research that has been done by the writer, past the three-pase pre test, treatment and post test. The frequency showed that the maximum score in pre-test was 59 and the minimum score was 23. While in post-test the maximum score was 82 and the minimum score was 59. Then it can be drawn the conclusion that there is significant improvement after treatment in class experiments, this is evidenced by the score of post-test is better than the score of pre-test.

Table 4.2

The score of pre test and post test in control class

No	Name	Pre Test	Post Test
1	AA	42	53
2	AD	42	50
3	AF	46	53
4	AR	42	52
5	EP	42	50
6	IK	44	53
7	IM	43	50
8	MFA	36	47
9	ME	51	54
10	MR	52	53
11	MI	50	51
12	MAM	44	53
13	MA	44	53
14	MU	52	54
15	NS	42	56
16	NSM	40	55
17	RA	44	50
18	RMS	42	49
19	RI	44	50
20	RIS	42	50
21	SR	45	44
22	SE	42	50
23	SDA	48	50

24	SK	51	57
25	SR	50	53
26	SRO	45	48
27	TNS	42	52
28	TRU	40	53
29	NAS	47	54
30	HE	50	55
31	MAS	54	57
32	MH	50	54
$\sum X$	**TOTAL**	1448	1663
M	**AVERAGE**	45.25	51.96875

$M_1 = \frac{\sum X_1}{N_1}$ $M_2 = \frac{\sum X_2}{N_2}$

$\quad = \frac{1663}{32}$ $\quad = \frac{1448}{32}$

$\quad = 51.9$ $\quad = 45.2$

Base on the calculation on the table 4.2 of pre test and post test assessment at comparison class, it shows that the sumulative value of pre test is 1448. The average of the pre test is 45.2. meanwhile, the cumulative value of post test is 1663. The average of the post test result is 51.9.

Detemine mean by formula:

$M = M1 - M2$

$\quad = 51.9 - 45.2$

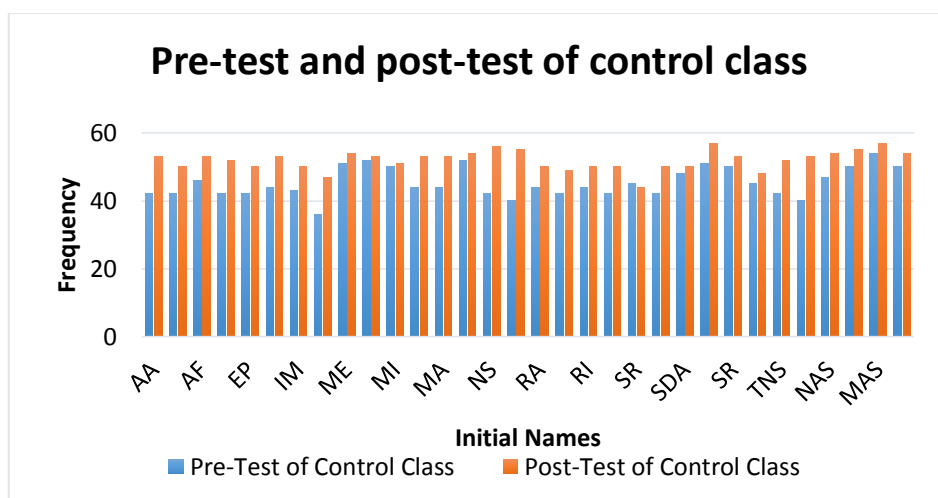$\quad = 6.7$

Note: M = Mean

M1 = Mean of post test

M2 = Mean of pre test

From the calculation of determine mean above, we have know that the average score of pre test and post tes (at control class) increase in amount of 6.7.

The researcher described the score of pre-test at the control class by the graphic as follow:

Graphic 4.2

The Test of Pre-Test And Post-Test in Control Class.

From the graph above, shows the comparison between the score of pre-test and post test in class control. Based on the results of the research that has been done by the writer, past the three-pase pre test, treatment and post test. The frequency showed that the maximum score in pre-test was 54 and the minimum score was 36. While in post-test the maximum score was 57 and the minimum score was 44. Then it can be drawn the conclusion that there is significant improvement after

treatment in class control, this is evidenced by the score of post-test is better than the score of pre-test commonly.

Table 4.3

Analysis of Pre-Test in Experiment Class

Subject: English   Mean Score: 41.2

Teacher: Ahmad Maula   Responden: 32

No	Name	Speaking Presentation					
		Score	Accent	Grammar	Vocabullary	Fluncy	Comprehension
1	AR	40	2	12	8	6	12
2	ATK	55	2	18	12	8	15
3	ARI	34	2	12	4	4	12
4	AA	53	3	18	12	8	12
5	AS	42	2	12	8	8	12
6	ATM	40	2	12	8	6	12
7	DC	23	1	6	4	4	8
8	EN	37	0	12	8	4	12
9	EY	36	2	12	4	6	12
10	FA	42	2	12	8	8	12
11	HH	29	1	12	4	4	8
12	IY	36	2	6	8	8	12
13	IH	44	2	18	4	8	12
14	IS	52	2	18	12	8	12

15	MTH	37	1	12	8	4	12
16	MH	31	1	6	4	8	12
17	MS	55	2	18	12	8	15
18	MTM	30	2	6	4	6	12
19	MAA	40	2	12	8	6	12
20	NU	49	3	18	8	8	12
21	RAM	59	2	18	16	8	15
22	RF	38	2	12	8	4	12
23	SA	39	1	12	8	6	12
24	SAH	38	2	6	12	6	12
25	SRA	46	2	12	12	8	12
26	SHI	46	2	12	12	8	12
27	SRO	42	2	12	8	8	12
28	SR	34	2	12	4	4	12
29	NUR	55	2	18	12	8	15
30	MR	37	1	12	8	4	12
31	ADA	44	2	18	8	4	12
32	MF	38	2	12	8	4	12
	TOTAL =		58	408	264	202	388

Table 4.4

Analysis of Post-Test in Experiment Class

Subject: English   Mean Score: 69.2

Teacher: Ahmad Maula   Responden: 32

No	Name	Speaking Presentation					
		Score	Accent	Grammar	Vocabullary	Fluncy	Comprehension
1	AR	69	2	24	16	8	19
2	ATK	74	3	24	16	8	23
3	ARI	59	2	18	16	8	15
4	AA	72	3	24	16	10	19
5	AS	76	3	24	16	10	23
6	ATM	61	2	24	12	8	15
7	DC	70	3	24	16	8	19
8	EN	63	2	18	16	8	19
9	EY	65	2	24	12	8	19
10	FA	69	2	24	16	8	19
11	HH	59	2	18	12	8	19
12	IY	75	2	24	16	10	23
13	IH	72	3	24	12	10	23
14	IS	65	2	24	12	8	19
15	MTH	66	3	24	12	8	19

16	MH	69	2	24	16	8	19
17	MS	76	3	24	16	10	23
18	MTM	69	2	24	16	8	19
19	MAA	74	3	24	16	8	23
20	NU	76	3	24	16	10	23
21	RAM	73	2	24	16	8	23
22	RF	69	2	24	16	8	19
23	SA	69	2	24	16	8	19
24	SAH	65	2	24	12	8	19
25	SRA	59	2	18	12	8	19
26	SHI	76	3	24	16	10	23
27	SRO	76	3	24	16	10	23
28	SR	75	2	24	16	10	23
29	NUR	69	2	24	16	8	19
30	MR	59	2	18	12	8	19
31	ADA	82	3	30	16	10	23
32	MF	65	2	24	12	8	19
	TOTAL =		76	744	472	276	648

After comparison between the score of pre-test and post-test in experimental class and control class, the writer calculates deviation and squared deviation and the result of the calculation by using the formula t-test can be seen at the analysis of the data.

B. Analysis of the Data

After getting the data the writer analyzed it by using statistic calculation of the determine data. The result of the determine can be seen as follow:

Table 4.5

The Score of Distribution Frequensy

No	x1	x2	X1	X2	$X1^2$	$X2^2$
1	69	53	2.2	1.1	4.84	1.21
2	74	50	7.2	-1.9	51.84	3.61
3	59	53	-7.8	1.1	60.84	1.21
4	72	52	5.2	0.1	27.04	0.01
5	76	50	9.2	-1.9	84.64	3.61
6	61	53	-5.8	1.1	33.64	1.21
7	70	50	3.2	-1.9	10.24	3.61
8	63	47	-3.8	-4.9	14.44	24.01
9	65	54	-1.8	2.1	3.24	4.41
10	69	53	2.2	1.1	4.84	1.21
11	59	51	-7.8	-0.9	60.84	0.81
12	75	53	8.2	1.1	67.24	1.21
13	72	53	5.2	1.1	27.04	1.21
14	65	54	-1.8	2.1	3.24	4.41
15	66	56	-0.8	4.1	0.64	16.81
16	69	55	2.2	3.1	4.84	9.61
17	76	50	9.2	-1.9	84.64	3.61

18	69	49	2.2	-2.9	4.84	8.41
19	74	50	7.2	-1.9	51.84	3.61
20	76	50	9.2	-1.9	84.64	3.61
21	73	44	6.2	-7.9	38.44	62.41
22	69	50	2.2	-1.9	4.84	3.61
23	69	50	2.2	-1.9	4.84	3.61
24	65	57	-1.8	5.1	3.24	26.01
25	59	53	-7.8	1.1	60.84	1.21
26	76	48	9.2	-3.9	84.64	15.21
27	76	52	9.2	0.1	84.64	0.01
28	75	53	8.2	1.1	67.24	1.21
29	69	54	2.2	2.1	4.84	4.41
30	59	55	-7.8	3.1	60.84	9.61
31	82	57	15.2	5.1	231.04	26.01
32	65	54	-1.8	2.1	3.24	4.41
$\sum$					1334.08	255.12

Note:

x1 = Score Post-Test (experiment Class)   X1 = x1-M1

x2 = Score Post-Test (Control Class)   X2 = x2-M2

$X1^2$ =The Squared value of X1

$X2^2$ = The squared value of X2

$df = N1 + N2 - 2$

$\quad = 32 + 32 - 2$

$\quad = 62$

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

$$= \frac{69.2 - 51.9}{\sqrt{\left(\frac{1334,1 + 255.1}{32 + 32 - 2}\right)\left(\frac{32 + 32}{32.32}\right)}}$$

$$= \frac{17.3}{\sqrt{\left(\frac{1589,2}{62}\right)\left(\frac{64}{1024}\right)}}$$

$$= \frac{17.3}{\sqrt{(25.6)(0.62)}}$$

$$= \frac{5.12}{\sqrt{5.12}}$$

$$= \frac{12.8}{2.26}$$

$$= 5.66$$

In general, score of post test in experiment class was better than post test in control class. It can be seen from the total amount of the score of post test in experiment class was 2216 and pre test was 1321, and average of post test was 69.2 and pre test was 41.2, while, the total amount of the score post test in control class was 1663 and pre test was 1448, and average of post test was 51.9 and pre test was 45.2.

Based on the result statistic calculation, it is obtained that the score of t_o= 5.66 degree of freedom is (5%) and the score of t_o= 5.66 degree of freedome is (1%). The value of 64 mentioned in the table about 1.67 (as of degree significant) and The value of 64 is mentioned in the table about 2.38 (as degree of significant).

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

If $t_{observation} > t_{table}$ the alternative hypothesis is accepted. It means there is significant different between learning using pair work technique and students' speaking ability.

If $t_{observation} < t_{table}$ the alternative hypothesis is rejected. It means there is no significant different between learning using pair work tecnique and students' speaking ability.

C. Interpretation of the Data

The analysis is aimed to know is the effectiveness of pair work technique to improve speaking ability. We have already known that the mean score of experiment class is 41.2 in pre test and 69.2 in post test. but the mean score of control class pre test was 45.2 and 51.9 in post test. Seeing calculation above, the experiment class get increase on 28 point. It is better than the control class get increase on 6.7 points.

Before deciding the result of hypothesis, the writer proposes interpretation towards to with procedure as follow:

a. Ha = $t_{observation} > t_{table}$. It means there is significant effectiveness between students' ability in speaking and using pair work technique.

b. Ho = $t_{observation} < t_{table}$. It means there is no significant effectiveness between students' ability in speaking and using pair work technique.

According to the data, the value of $t_{observation}$ is bigger than t_{table}. $t_{observation} = 5.66 > t_{table} = 1.67$ or $t_{observation} = 5.66 > t_{table} = 2.38$ (1%), so H_o is rejected and H_a is accepted.

From the result above, the writer give conclusion that there is the effectiveness of pair work technique on students' speaking ability. It can be seen that the students' get good or better score by using pair work technique.