

CHAPTER IV

RESULT AND DISCUSSION

A. The Description of the Research

In this chapter, the writer will attempt to submit the data as outcomes of research that hold SMAN 1 Ciruas. The research is only directed to the students for Tenth grades. The writer divided them into two groups. 38 students as an experimental class from first grades of class Xa and 38 students as a control class from first grades of class Xb.

The research compares the achievement of pre-test and post-test, to know whether PowerPoint Presentation effective in teaching speaking. The writer did an analysis of quantitative data. The data is obtained by giving pre-test and post-test to the experimental class and control class. The pre-test given before given treatment and post-test after given a different treatment both of classes.

The writer describes the result of pre-test in experimental class by the table below:

Table 4.1**The Students' Score of Pre-test at the Experimental Class**

No	Name	Pre-test
1	Ad	84
2	Apr	88
3	A K	88
4	A D	88
5	Ay	80
6	D W	84
7	D F	88
8	D H	84
9	El S	88
10	Fah A	76
11	Fay	84
12	Fin	72
13	Ilm	44
14	Ima	88
15	Ind	84
16	Kir	64
17	KriS	64

18	Mav	72
19	Muht	56
20	MRi	72
21	MH	76
22	MMu	80
23	NN	84
24	PI	56
25	SA	68
26	SY	80
27	SA	68
28	SA	92
29	SR	80
30	SK	68
31	UM	80
32	YD	88
33	YY	84
34	ZK	84
35	JS	56
36	IN	60
37	WR	76

38	YY	68
N = 38	Total Score	2896
	Average	76.2

The table above shows about the students' pre-test at the experimental class. The data the highest score of pre-test at the experimental class is 92, it is gotten by one student and the lowest score of pre-test at experimental class is 44, it is gotten by one student and the average score of pre-test is 76.2.

Table 4.2

The Students' Score of Pre-test at the Control Class

No	Name	Pre-test
1	ADY	76
2	AS	80
3	AA	84
4	ALd	68
5	APZ	72
6	Ary	72
7	AF	76
8	AN	76

9	DR	76
10	DR	68
11	DF	65
12	EKP	48
13	ELS	48
14	EBA	80
15	FS	60
16	FU	68
17	GL	48
18	HA	52
19	IND	72
20	ING	68
21	IRF	80
22	MUH	60
23	MZ	72
24	MUL	64
25	NUR	56
26	NURK	68
27	NP	60

28	PD	64
29	RKP	84
30	SG	56
31	TASY	84
32	TRO	60
33	Vae	64
34	Ven	68
35	YA	84
36	YY	64
37	SR	72
38	NUR	44
N = 38	Total Score	2561
	Average	67.3

The table above shows about the students' pre-test at the control class. The data the highest score of pre-test at the control class is 84, it is gotten by four students and the lowest score of pre-test at the control class is 44, it is gotten by one student and the average score of pre-test is 67.3.

Table 4.3**The Students' Score of Post-test at the Experimental Class**

No	Name	Post-test
1	Ad	88
2	Apr	92
3	A K	92
4	A D	92
5	Ay	92
6	D W	88
7	D F	92
8	D H	88
9	El S	92
10	Fah A	88
11	Fay	88
12	Fin	84
13	Ilm	88
14	Ima	92
15	Ind	88
16	Kir	92

17	KriS	68
18	Mav	96
19	Muht	84
20	MRi	88
21	MH	84
22	MMu	92
23	NN	92
24	PI	64
25	SA	92
26	SY	84
27	SA	80
28	SA	96
29	SR	92
30	SK	84
31	UM	88
32	YD	92
33	YY	88
34	ZK	88
35	JS	60

36	IN	76
37	WR	80
38.	YY	80
N = 38	Total Score	3.284
	Average	86.4

The table above shows about the students' post-test at the experiment class. The data the highest score of post-test at the experiment class is 96, it is gotten by two students and the lowest score of post-test at the experiment class is 60, it is gotten by one student and the average score of post-test is 86.4.

Table 4.4

The Students' Score of Post-test at the Control Class

No	Name	Post-test
1	ADY	84
2	AS	92
3	AA	88
4	ALd	72
5	APZ	84

6	Ary	76
7	AF	80
8	AN	80
9	DR	80
10	DR	72
11	DF	80
12	EKP	68
13	ELS	60
14	EBA	84
15	FS	80
16	FU	80
17	GL	60
18	HA	56
19	IND	76
20	ING	72
21	IRF	84
22	MUH	64
23	MZ	84
24	MUL	76

25	NUR	68
26	NURK	72
27	NP	72
28	PD	68
29	RKP	88
30	SG	60
31	TASY	88
32	TRO	68
33	Vae	72
34	Ven	72
35	YA	92
36	YY	84
37	SR	76
38	NUR	48
N = 38	Total Score	2.860
	Average	75.2

The table above shows about the students' post-test at the control class. The data the highest score of post-test at the control class is 92, it is gotten by two students and the lowest score of post-test at the

control class is 48, it is gotten by one student and the average score of post-test is 75.2.

B. Data Analysis

Table 4.5

The difference Score between Pre-Test and Post-Test of Experimental Class

No	Name	Pre-Test (x_1)	Post-Test (x_2)	Deviation ($X = x_2 - x_1$)	Squared Deviation (x^2)
1	Ad	84	88	4	16
2	Apr	88	92	4	16
3	A K	88	92	4	16
4	A D	88	92	4	16
5	Ay	80	92	12	144
6	D W	84	88	4	16
7	D F	88	92	4	16
8	D H	84	88	4	16
9	El S	88	92	4	16

10	Fah A	76	88	12	144
11	Fay	84	88	4	16
12	Fin	72	84	12	144
13	Ilm	44	88	44	1936
14	Ima	88	92	4	16
15	Ind	84	88	4	16
16	Kir	64	92	28	784
17	KriS	64	68	4	16
18	Mav	72	96	24	576
19	Muht	56	84	28	784
20	MRi	72	88	16	256
21	MH	76	84	12	144
22	MMu	80	92	12	144
23	NN	84	92	12	144
24	PI	56	64	8	64
25	SA	68	92	24	576
26	SY	80	84	4	16
27	SA	68	80	12	144
28	SA	92	96	4	16

29	SR	80	92	12	144
30	SK	68	84	16	256
31	UM	80	88	8	64
32	YD	88	92	4	16
33	YY	84	88	4	16
34	ZK	84	88	4	16
35	JS	56	60	4	16
36	IN	60	76	16	256
37	WR	76	80	4	16
38	YY	68	80	12	144
				$\Sigma X = 396$	$\Sigma X^2 = 7152$

Table 4.6

The difference Score between Pre-Test and Post-Test of Control Class

No	Name	Pre-Test (x_1)	Post-Test (x_2)	Deviation ($X = x_2 - x_1$)	Squared Deviation (x^2)
1	ADY	76	84	8	64
2	AS	80	92	12	144
3	AA	84	88	4	16

4	ALd	68	72	4	16
5	APZ	72	84	12	144
6	Ary	72	76	4	16
7	AF	76	80	4	16
8	AN	76	80	4	16
9	DR	76	80	4	16
10	DR	68	72	4	16
11	DF	65	80	15	225
12	EKP	48	68	20	400
13	ELS	48	60	12	144
14	EBA	80	84	4	16
15	FS	60	80	20	400
16	FU	68	80	12	144
17	GL	48	60	12	144
18	HA	52	56	2	4
19	IND	72	76	2	4
20	ING	68	72	4	16
21	IRF	80	84	4	16
22	MUH	60	64	4	16

23	MZ	72	84	12	144
24	MUL	64	76	12	144
25	NUR	56	68	12	144
26	NURK	68	72	4	16
27	NP	60	72	12	144
28	PD	64	68	4	16
29	RKP	84	88	4	16
30	SG	56	60	4	16
31	TASY	84	88	4	16
32	TRO	60	68	8	64
33	Vae	64	72	8	64
34	Ven	68	72	4	16
35	YA	84	92	8	64
36	YY	64	84	20	400
37	SR	72	76	4	16
38	NUR	44	48	4	16
				$\Sigma Y = 295$	$\Sigma Y^2 = 3289$

From the data gotten above, the writer calculated t-test using some steps, there are:

1. Determining Mean of Score Experimental Class (M_x), through formula:

$$\begin{aligned} M_x &= \frac{\sum X}{N} \\ &= \frac{396}{38} \\ &= 10.4 \end{aligned}$$

2. Determining Mean of Score Control Class (M_y), through formula:

$$\begin{aligned} M_y &= \frac{\sum y}{N} \\ &= \frac{295}{38} \\ &= 7.7 \end{aligned}$$

3. Determining the Total Square of Error of Experimental Class (X), through formula:

$$\begin{aligned} \sum X^2 &= \sum X^2 - \left[\frac{\sum x}{N} \right]^2 \\ &= 7152 - \left[\frac{396}{38} \right]^2 \\ &= 7152 - \frac{156816}{38} \\ &= 7152 - 4126 \\ &= 3026 \end{aligned}$$

The result above shows about the average score (mean) at experimental class. The writer got the data from $\sum X_1$, $\sum X_2$, $\sum X$ and $\sum X^2$. After words the writer calculated the data based on the formula above.

4. Determine the total square of error control class (Y) with formula:

$$\begin{aligned}\sum y^2 &= \sum y^2 - \left[\frac{\sum y}{N} \right]^2 \\ &= 3289 - \left[\frac{295}{38} \right]^2 \\ &= 3289 - \frac{87025}{38} \\ &= 3289 - 2290 \\ &= 999\end{aligned}$$

The result above shows about the average score (mean) at control class. The writer got the data from $\sum Y_1$, $\sum Y_2$, $\sum Y$ and $\sum Y^2$. After words the writer calculated the data based on the formula above.

5. Calculates T-test

Notes:

$$t = \frac{Mx - My}{\sqrt{\frac{\sum X^2 + \sum Y^2}{Nx + Ny - 2} \left[\frac{1}{Nx} + \frac{1}{Ny} \right]}}$$

T = test

M = means of each group from the deviation

X = the deviation of every X_1 and X_2

Y = the deviation of every Y_1 and Y_2

N = number of students

$$t = \frac{Mx - My}{\sqrt{\frac{\sum X^2 + \sum Y^2}{Nx + Ny - 2} \left[\frac{1}{Nx} + \frac{1}{Ny} \right]}}$$

$$t = \frac{10.4 - 7.7}{\sqrt{\frac{3026 + 999}{38 + 38 - 2} \left[\frac{1}{38} + \frac{1}{38} \right]}}$$

$$t = \frac{2.7}{\sqrt{\frac{4025}{74} \left[\frac{2}{76} \right]}}$$

$$t = \frac{2.7}{\sqrt{54.39 \times 0.02}}$$

$$t = \frac{2.7}{\sqrt{1.0878}}$$

$$t = \frac{2.7}{1.04}$$

$$t = 2.59$$

The result above shows about the average score (mean) at experimental class. The writer got the data from $\sum X$, $\sum Y$, $\sum Y$ and $\sum X^2$. After words the writer calculated the data based on the formula above.

Determine the Degree of Freedom, with formula:

$$Df = N_X + N_Y - 2$$

$$Df = 38 + 38 - 2$$

$$Df = 74$$

The result above shows about the score of samples both experimental and control class. The writer used 76 for research 38 students from X a as experimental class and 38 students from X b 4 as a control class.

Comparing “t” has tested in calculating ($t_o = 2.59$) and $df = 74$. There is no df (degree of freedom for 74, so the writer used the closer “df” from 76, which has been tested on t-table ($t_i 5\% = 1.68$ and $t_i 1\% = 2.42$). it can be known that $t_o > t_i 5\%$ and $t_o > 1\%$, it means $1.68 < 2.59 > 2.42$.

C. Interpretation of Data

The data show that the mean of pre-test scores obtained by students of X as an experimental class = 76.2 and pre-test scores obtained by students of Xb as a control class = 67.3. The highest score in two classes is different that is class Xa as an experimental class got 92 and as a control class got 84. The lowest score of pre-test in both classes was 44 for experimental class and 44 also for control class.

The mean of post-test, score of Xa as an experimental class = 86.4 was greater than Xb as a control class = 75.2. The highest score of post-test of Xa as an experimental class got 96, and Xb as a control class got 92. The lowest post-test of experimental class 60 and the lowest post-test of control class 48.

From the interpretation data above $t\text{-count} > t\text{-table}$ means there is significance effect of using PowerPoint Presentation.

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

$$H_a = t_o > t_t$$

$$H_o = t_o < t_t$$

H_a : Alternative Hypothesis

H_0 : Null Hypothesis

T_0 : The value of t- count

T_t : The value of t- table

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

If $t_0 > t_t$: The alternative hypothesis is accepted. It means there is significant effect by using PowerPoint Presentation on students' speaking skill.

If $t_0 < t_t$: The alternative hypothesis is rejected. It means there is no significant by using PowerPoint Presentation on students' speaking skill.

From the result calculation above, the of $t_0 = 2.59$ the degree of freedom (df) = 76. The writer used the degree of significant 5% = 1.68 and 1% = 2.42. It means that H_a (Alternative Hypothesis) of the writer is accepted and H_0 (Null Hypothesis) is rejected.

After getting the data, the writer compared it t_t both degree of significant 5% and 1% $t_0 > t_t$ 5% and $t_0 > t_t$ 1%, it means $2.42 < 2.59 > 1.68$. It means (Alternative Hypothesis) of the research is accepted.

Based on the criteria above, the writer inferred that her alternative hypothesis (H_a) teaching speaking using PowerPoint Presentation is accepted. On the other hand, null hypothesis (H_o) teaching speaking without PowerPoint Presentation doesn't effective students' speaking is rejected.

The writer has already known that the average score of pre-test in experimental class is 76.2 and the average score of post-test in experimental class is 86.4 but the average score of pre-test in control class is 67.3 and the average score of post-test in control class is 75.2.

All of the students gave positive response toward the application of the technique. They like to learn English speaking skill through the use of PowerPoint Presentation technique, no one of them did not like the activity. Besides, all of the students also said that this technique could motivate them in learning and made them easier to learn English speaking

Moreover, from the result of the writer's view it showed that the students' motivation was good after given a treatment. It could be seen from the students' participation during the teaching-learning process

and doing the tasks. All of the students looked enjoying the activities in the class. Their attention to the teaching learning activities became more serious and they did the instructions enthusiastically. It also happened when the students were working in the groups. It was observed their activeness in working group and in the following the tournament in every teaching learning activity. As the result, the teaching and learning process ran well in which all of the students got involved in the activity. Besides, during class was conducted, all of them were present that made the teaching learning process could be followed by all students.