

CHAPTER IV

RESULT OF THE RESEARCH

A. Description of Data

In this chapter the researcher explains the result of the research. The writer will attempt to submit the data as outcomes of research has hold in first grade SMAN 8 Pandeglang. The writer takes 50 students as a subject this research. It is divided into two classes. They are 25 students from class Ips 5 as the experimental class and 25 students from class Ipa 4 as the control class.

In experiment class, the researcher use Animation Movie treatment to know the effectiveness of using Animation Movie in students writing skill, and in control class the researcher did not use using Animation Movie in students writing skill.

To find out the effectiveness of using Animation Movie in students writing skill, the researcher uses test, they are pre and post test to measure the student ability on writing before and after giving the treatment by using Animation Movie. Pre-test was gave to the students which is aim to knowing students writing skill before giving the

treatment, and the post-test which is aim to knowing students writing skill after they have given the treatment. The result of post-test in experimental class is named variable (X_1) and the result of post-test in control class is named variable (X_2).

Pre-test contains just one topic (essay) which retell students write narrative text about malin kundang minimal 50 word, meanwhile post-test contains 3 topic which is choose one of them minimal in 60 word.

The students score of class IPS 5 as the experimental class will be described in the following table.

1. Experiment class

The researcher described the result of pre-test at the experiment class by the following table:

Table 4.1

Result of pre-test in experimental class

No	Name	Content	Organiz ation	Vocab	Langua ge	Mechan ic	Score
1	AA	13	9	7	7	4	40
2	BI	18	13	13	12	4	60

3	DA	15	14	9	18	4	60
4	FR	20	17	10	12	4	65
5	H	13	9	10	15	3	50
6	MF	19	12	17	12	5	65
7	MF	20	17	15	13	5	70
8	MP	19	17	17	16	4	73
9	MS	15	10	10	11	4	50
10	N	22	18	15	19	4	78
11	SE	20	15	15	17	3	70
12	SS	13	11	11	13	2	50
13	SJ	17	13	16	15	4	65
14	SA	13	10	10	13	3	49
15	SN	15	15	13	10	4	57
16	SR	17	13	16	10	4	60
17	S	14	9	9	10	3	45
18	S	14	13	13	11	4	55
19	SY	14	15	10	10	4	53
20	TI	15	15	13	8	4	55

21	WF	19	11	10	11	4	55
22	WS	23	16	15	19	4	77
23	Y	14	10	10	8	3	45
24	YR	18	13	16	15	4	66
25	YS	15	12	10	10	3	50
N=25		Total score					1463
		Average					58.52

From the table 4.1 can be seen the scores from 25 student in pre-test scores on the criteria at the experimental class, the highest score was 78, and the lower score was 40. The average score of pre-test in experimental class was 58.52.

While the result of post-test at the experiment class got better score. It can be describe at the following table:

Table 4.2

Result of post-test in experimental class

No	Name	Content	Organi zation	Vocab	Langua ge	Mechan ic	Score
1	AA	24	19	17	10	5	75

2	BI	15	16	15	20	4	70
3	DA	15	15	15	15	5	65
4	FR	17	17	17	15	4	70
5	H	26	17	17	21	4	85
6	MF	15	17	18	20	5	75
7	MF	21	18	18	18	5	80
8	MP	25	17	17	21	5	85
9	MS	20	15	15	15	5	70
10	N	25	17	17	21	5	85
11	SE	25	20	20	25	5	95
12	SS	26	17	17	21	4	85
13	SJ	25	17	17	21	5	85
14	SA	22	15	15	18	5	75
15	SN	20	15	20	15	5	75
16	SR	25	20	20	21	4	90
17	S	20	15	17	23	5	80
18	S	25	13	20	23	4	85
19	SY	15	15	20	20	5	75

20	TI	25	17	17	21	5	85	
21	WF	22	17	16	16	4	75	
22	WS	20	20	20	15	5	80	
23	Y	20	19	17	20	4	80	
24	YR	20	16	15	15	4	70	
25	YS	20	19	17	15	4	75	
N:25		Total score					1970	
		Average					78.8	

From the table 4.2 can be seen the scores from 25 student in post-test scores on the criteria at the experimental class, the highest score was 95, and the lower score was 65. The average score of post-test in experimental class was 78.8.

Table 4.3

The score of pre-test and post-test in experimental class

No	Name	Pre-test	Post-test
1	AA	65	75
2	BI	65	70

3	DA	70	70
4	FR	70	80
5	H	60	85
6	MF	70	80
7	MF	50	80
8	MP	60	85
9	MS	55	70
10	N	65	85
11	SE	60	95
12	SS	60	85
13	SJ	65	85
14	SA	70	75
15	SN	60	75
16	SR	60	90
17	S	50	80
18	S	80	85
19	SY	70	80
20	TI	70	85

21	WF	65	80
22	WF	60	80
23	Y	65	80
24	YR	75	80
25	YS	70	75
N:25	Total score	1610	2010
	Average	64.4	80.4

The table above describe the result pre-test and post-test in experimental class. The highest score in pre-test is 80 and post-test is 95. While the lowest in pre-test is 50 and post-test is 70

To find the mean score, the researcher follows the formula:

$$M_1 = \frac{\sum K_2}{N_2}$$

$$= \frac{2010}{25}$$

$$= \mathbf{80.4}$$

$$M_2 = \frac{\sum K_1}{N_1}$$

$$= \frac{1610}{25}$$

$$= \mathbf{64.4}$$

Note: M1 = mean

X1 = students' scores (pre-test)

X2 = students' scores (post-test)

N = number of students

According to the calculation on the table 1 of pre-test and post-test assessment in experiment class, it shows that the cumulative value of assessment result before applying Animation movie is 1610, the average of pre-test is 64.4. Meanwhile, the cumulative of assessment result after applying Animation movie is 2010, the average of the post-test is 80.4 .

Determining mean by formula:

$$\begin{aligned} M &= M1 - M2 \\ &= 80.4 - 64.4 \\ &= 16 \end{aligned}$$

Note: M = Mean

M1 = mean of post test

M2 = mean of pre test

From the calculation of mean determining above, it can be known that the average score of pre test and post test (in experiment class) increase in amount of 16.

2. Control class

Table 4.4

Result of pre-test in control class

No	Name	Content	Organi zation	Vocab	Langua ge	Mechan ic	Score
1	A	15	11	14	10	5	55
2	AB	15	15	10	15	5	60
3	AW	18	15	15	13	4	65
4	AWN	17	14	14	8	4	57
5	AR	18	10	10	9	4	51
6	AEM	15	9	9	10	4	47
7	AN	18	10	9	8	4	49
8	AFN	18	11	10	9	3	51
9	AN	17	10	13	10	5	55

10	AR	20	13	11	11	5	60
11	CI	19	13	8	8	3	51
12	CR	17	14	16	14	4	65
13	DR	19	11	14	12	4	60
14	DL	19	14	13	10	4	60
15	DI	18	18	11	9	4	60
16	EYN	15	15	9	10	3	52
17	FS	18	15	14	9	4	60
18	HB	19	11	10	8	4	52
19	IR	18	17	17	10	4	66
20	S	15	13	10	10	4	52
21	SAS	20	15	10	14	3	62
22	SR	18	18	11	10	4	58
23	SU	19	15	14	8	4	60
24	TSM	15	14	14	9	4	56
25	YDA	18	15	13	9	4	59
N:25		Total score					1423
		Average					56.92

Table 4.5
Result of post-test in control class

No	Name	Content	Organiz ation	Vocab	Langua ge	Mechan ic	Score
1	A	16	15	14	11	4	60
2	AB	18	14	14	10	4	60
3	AW	20	19	15	12	4	70
4	AWN	17	13	15	10	4	59
5	AR	18	13	11	9	4	55
6	AEM	17	15	15	11	4	62
7	AN	15	13	13	8	3	52
8	AFN	15	14	13	9	4	55
9	AN	17	13	13	10	4	57
10	AR	18	15	15	10	4	62
11	CI	19	14	13	10	4	60
12	CR	19	18	14	10	4	65
13	DR	16	14	13	13	4	60

14	DL	20	14	13	14	3	64	
15	DI	19	16	15	16	4	70	
16	EYN	15	13	14	9	4	55	
17	FS	20	15	15	8	4	62	
18	HB	16	14	11	12	4	57	
19	IR	19	17	17	11	4	68	
20	S	18	15	13	13	4	63	
21	SAS	20	18	13	10	4	65	
22	SR	19	15	12	10	4	60	
23	SU	18	18	15	10	4	65	
24	TSM	19	16	14	9	3	61	
25	YDA	19	15	14	8	4	60	
N:25		Total score					1527	
		Average					61.08	

The researcher describe the student improvement score of pre-test and post-test in the control through table and graphic as follow:

Table 4.6**The score of pre-test and post-test of control class**

No	Name	Pre-test	Post-test
1	A	55	60
2	AB	60	60
3	AW	65	70
4	AWN	57	59
5	AR	51	55
6	AEM	47	62
7	AN	49	57
8	AFN	51	55
9	AN	49	57
10	AR	60	62
11	CI	51	60
12	CR	65	65
13	DR	60	60
14	DL	60	64
15	DI	60	70

16	EYN	52	55
17	FS	60	62
18	HB	52	57
19	IR	66	68
20	S	52	63
21	SAS	62	65
22	SR	58	60
23	SU	60	65
24	TSM	56	61
25	YDA	59	60
N:25	Total score	1417	1532
	Average	56.68	61.28

The table above describe the result pre-test and post-test in experimental class. The highest score in pre-test is 66 and post-test is 68. While the lowest in pre-test is 47 and post-test is 55.

To find the mean score, the researcher follows the formula:

$$M_1 = \frac{\sum X_2}{N_2}$$

$$\begin{aligned}
 &= \frac{1532}{25} \\
 &= \mathbf{61.28} \\
 M_2 &= \frac{\sum X_1}{N_1} \\
 &= \frac{1417}{25} \\
 &= \mathbf{56.68}
 \end{aligned}$$

Note: M1 = mean

X1 = students' scores (pre-test)

X2 = students' scores (post-test)

N = number of students

According to the calculation on the table 1 of pre-test and post-test assessment in experiment class, it shows that the cumulative value of assessment result before applying Animation movie is 1417, the average of pre-test is 56.68. Meanwhile, the cumulative of assessment result after applying Animation movie is 1532, the average of the post-test is 61.28

Determining mean by formula:

$$\begin{aligned}
 M &= M1 - M2 \\
 &= 61.28 - 56.68
 \end{aligned}$$

$$= 6,07$$

Note: M = Mean

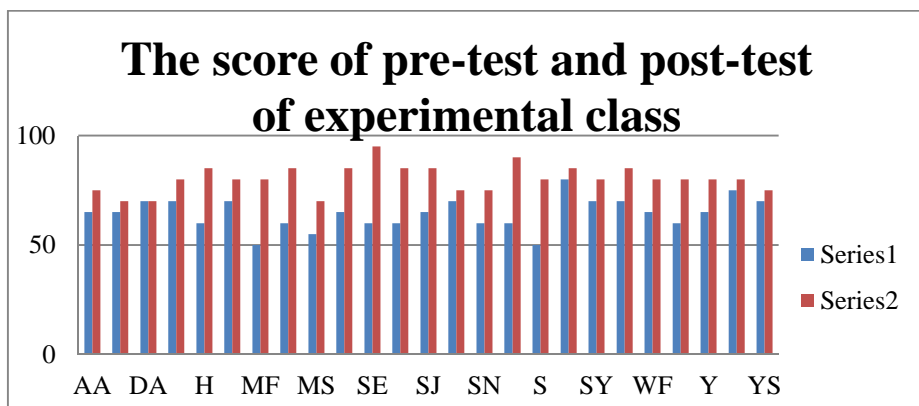
M1 = mean of post test

M2 = mean of pre test

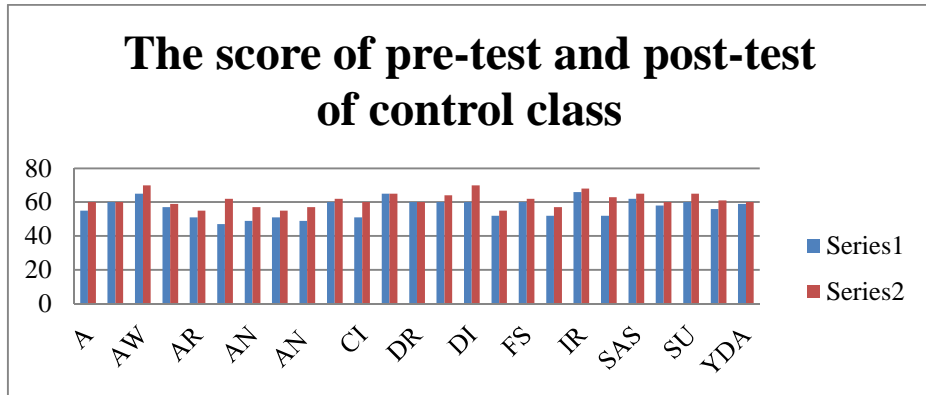
From the calculation of mean determining above, it can be known that the average score of pre test and post test (in control class) increase in amount of 6.07

GRAPHIC 4.1

The score of pre-test and post-test of experimental class



From graphic 4.1 above showed the result of the students pre-test and post-test score in the experimental class

GRAPHIC 4.2**The score of pre-test and post-test of control class****1. The Analysis of Data**

After getting the data, the researcher analyzed it using statistic calculation to determine the data. The result of data determining can be seen as foll

Table 4. 7**The Score of Frequency Distribution**

No	x1	x2	X1	X2	X1 ²	X2 ²
1.	75	60	5.4	1.28	29.16	1.64
2.	70	60	10.4	1.28	108.16	1.64
3.	70	70	10.4	-8.72	108.16	76.04

4.	80	59	0.4	2.25	0.16	5.06
5.	85	55	-4.6	6.28	21.16	39.44
6.	80	62	0.4	-0.72	0.16	0.52
7.	80	52	0.4	9.28	0.16	86.12
8.	85	55	-4.6	6.28	21.16	39.44
9.	70	57	10.4	4.28	108.16	18.32
10.	85	62	-4.6	-0.72	21.16	0.52
11.	95	60	-14.6	1.28	213.16	1.64
12.	85	65	-4.6	-3.72	21.16	13.84
13.	85	60	-4.6	1.28	21.16	1.64
14.	75	64	5.4	-2.72	29.16	7.40
15.	75	70	5.4	-8.72	29.16	76.04
16.	90	55	-9.6	6.28	92.16	39.44
17.	80	62	0.4	-0.72	0.16	0.52
18.	85	57	-4.6	4.28	21.16	18.32
19.	80	68	0.4	-6.72	0.16	45.16
20.	85	63	-4.6	-1.72	21.16	2.96
21.	80	65	0.4	-3.72	0.16	13.84

22.	80	60	0.4	1.28	0.16	1.64
23.	80	65	0.4	-3.72	0.16	13.84
24.	80	61	0.4	0.28	0.16	0.08
25.	75	60	5.4	1.28	29.16	1.64
	2010	1527	0	4.97	896	506.74

Note :

x1 = Score Post-Test (Experiment Class) **X1 = x1-M1**

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

X1¹ = Squared value of X1 **X2²** = Squared

X2

The formula to determine T-table with significance 5% and 1% as follow:

$$\begin{aligned}
 Df &= N1+N2-2 \\
 &= 25+25-2 \\
 &= 48 \text{ (consult to "t" table score)}
 \end{aligned}$$

Based on t table that there is 50. With df as number 50 is got t table as follow:

a. At significance level 5% : $t_t = 2.01$

b. At significance level 1% : $t_{\alpha} = 2.68$

$$\begin{aligned}
 t &= \frac{M_1 - M_2}{\sqrt{\frac{(\sum X_1^2 + X_2^2)(N_1 + N_2)}{(N_1 + N_2 - 2) N_1 \cdot N_2}}} \\
 &= \frac{80.4 - 61.28}{\sqrt{\frac{(896 + 506.74)(25 + 25)}{(25 + 25 - 2) \cdot 25 \cdot 25}}} \\
 &= \frac{19.12}{\sqrt{\left\{\frac{1402.74}{48}\right\} \left\{\frac{50}{625}\right\}}} \\
 &= \frac{19.12}{\sqrt{\{29.22\} \{0.08\}}} \\
 &= \frac{19.12}{\sqrt{2.34}} \\
 &= \frac{19.12}{1.53} \\
 &= \mathbf{12.50}
 \end{aligned}$$

In general, the scores of post-test in experiment class was better than the scores of post-test in control class. It can be seen from the total amount of the scores of post-test in experiment class was 2010 and pre-test was 1610 and the average score of post-test was 80.4 and pre-test was 64.4, while the total amount of the post-test scores in control class

was 1532 and pre-test was 1417, and the average score of post-test was 61.28 and pre-test was 56.68

According to the result of statistic calculation, it is obtained that the score of t_0 is = 12.50 degree of freedom is (5)%. The value of 12.50 is mentioned in the table about 2.01 (as degree of significant).

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

- a. If $t_{\text{observation}} > t_{\text{table}}$ the alternative hypothesis is accepted. It means there is effectiveness of Animation movie on students' writing skill.

2. Interpretation of the Data

The analysis is aimed to know the effectiveness of Animation movie on students' writing skill. It has been known that the mean score of experiment class is 1610 in pre-test and 2010 in post-test. Seeing the calculation above, the experiment class is improved on 16 points. It is better than the control class which is improved on 4.6 points.

Before deciding the result of hypothesis, the researcher proposes the interpretation with procedures as follows:

- a. $H_a = t_{\text{observation}} > t_{\text{table}}$. It means there is effectiveness of Animation movie on students' writing skill.

- b. $H_0 = t_{\text{observation}} < t_{\text{table}}$. It means there is no effectiveness of Animation movie on students' writing skill. According to the data, the value of $t_{\text{observation}}$ is bigger than t_{table} . $t_{\text{observation}} = 12.50 > t_{\text{table}} = 2.01$ (5%) or $t_{\text{observation}} = 12,50 > t_{\text{table}} = 2.68$ (1%), so H_0 is rejected and H_a is accepted.

From the result above, the researcher gives conclusion that there is the effectiveness of Animation movie on students' writing skill. It can be seen that the students get good or better scores use Animation movie.