

CHAPTER IV

RESULT AND DISCUSSION

A. Description of Data

In this chapter, the writer would like to present the description of the data obtained. As the writer stated at previous chapter that the population of the study was the first grade of junior Islamic high school MTs Al-Khairiyah Tambang Ayam Anyer Serang Banten, as tested in this chapter, the writer divided them into two groups, 25 students as control class, it is from class A, and 25 students as experiment class, it is from class B. The goal of the research is intended to prove the accurate data in accordance with the research title.

To find out the effectiveness of using Picture Series In Teaching Procedure Text Writing, the writer identified some result, they are: the score of students before treatment, the score of students after treatment, the differences between pre test and post test score of students and from the differences of students between the students who are taught by using Picture Series In Teaching and the students who are not taught by using Picture Series In Teaching and learning process, the writer did an analysis of quantitative data. The data is obtained by giving test to the experimental class and control class after giving a different treatment both classes.

The students have poor ability of learning English before used Picture Series In Teaching. They find the difficulties in learning English but after used Picture Series In Teaching students has better achievement. It can be seen from the result of pre-test and post-test.

To know the effectiveness of using Picture Series In Teaching on students' procedure text writing, the writer gave the test to students as the sample both at the experimental class and at control class. The test that used in this research divided into two types, there are pre-test and post-test. The pre-test is the test that giving before treatment and the post-test is given after giving the treatment. On the test, the students should answer some questions that given by the writer. In pre-test, the writer has given twenty of multiple choices in pre-test and also in post-test.

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

Table 4.1

The Students' Score of Pre-test and Post-test at Experimental Class

No	Name	Score	
		Pre-Test	Post-Test
1	AB	53	84
2	AD	63	84
3	AS	43	69
4	AKN	43	74
5	ASY	48	67
6	BGO	40	64

7	CHIK	64	84
8	DAN	36	58
9	DEY	38	65
10	ELO	30	69
11	FAJ	33	69
12	FIRH	30	69
13	FIT	38	64
14	LIN	41	79
15	MAS	31	79
16	MIFT	32	69
17	MTA	36	79
18	NOVI	39	74
19	PIT	36	71
20	PUT	27	76
21	RIZ	38	69
22	SOP	33	56
23	SUS	33	69
24	TAQ	27	71

25	REV	36	78
N=25	Total Score	$\Sigma = 968$	$\Sigma = 1790$
	Average	38,72	71,6

The table above shows about the students' pre-test score at the experimental class. The data the highest score of pre-test at the experimental class is 27, it is gotten by one student and the lowest score of pre-test at the experimental class is 64, it is gotten by one student and average score of pre-test is 38,72.

The result of post-test at experimental class is better score than score at control class. The data shows that the highest score of post-test at the experimental class is 84, it is gotten by one student and the lowest score of post-test at the experimental class is 56, it is gotten by four students and the average score of post-test is 71,6.

Table 4.2

The Students' Score of Pre-test and Post-test at Control Class

No	Name	Score	
		Pre-Test	Post-Test
1	AH	53	58
2	AND	48	48

3	AN	41	48
4	ANGG	43	47
5	ASR	48	58
6	DES	40	63
7	ED	54	54
8	FAI	36	58
9	HIK	38	62
10	IHF	30	68
11	IH	33	52
12	IK	30	60
13	LAY	38	58
14	M.FA	41	55
15	MR	31	51
16	RAI	32	49
17	RH	36	57
18	RYAH	39	49
19	RO	36	49
20	SAH	27	47

21	SAL	38	47
22	SUL	33	46
23	WAH	33	45
24	FUD	53	58
25	FEB	48	48
N=25	Total Score	$\Sigma=878$	$\Sigma= 1229$
	Average	38,17	53.43

The table above shows about the students' pre-test score at the control class. The data the highest score of pre-test at the control class is 38, it is gotten by two students and the lowest score of pre-test at the control class is 27, it is gotten by one student and average score of pre-test is 54.

The table above shows us about the students' post-test score at the control class. The data the highest score of post-test at the control class 62, it is gotten by one student and the lowest score of post-test at the control class is 45, it is gotten by One student and the average score of post-test is 53.

B. Analyzing The Data

1. Data Analysis of Test

Table 4.3
The Difference Score between Pre-Test and Post-Test of
experimental class

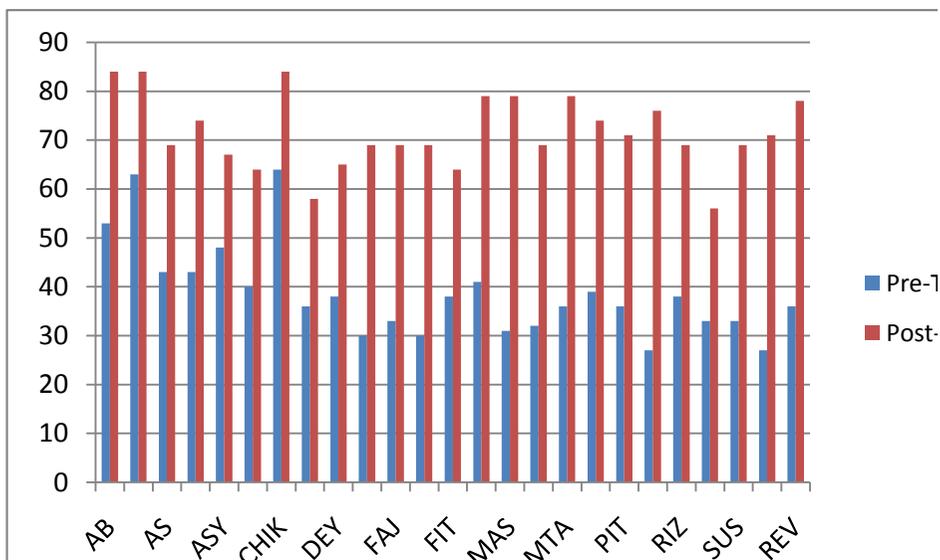
NO	NAME	Pre-Test (x_1)	Post-Test (x_2)	Deviation ($X=x_2-x_1$)	Squared Deviation (X^2)
1	AB	53	53	0	0
2	AD	63	48	15	225
3	AS	43	41	2	4
4	AKN	43	43	0	0
5	ASY	48	48	0	0
6	BGO	40	40	0	0
7	CHIK	64	54	10	100
8	DAN	36	36	0	0
9	DEY	38	38	0	0
10	ELO	30	30	0	0
11	FAJ	33	33	0	0
12	FIRH	30	30	0	0

13	FIT	38	38	0	0
14	LIN	41	41	0	0
15	MAS	31	31	0	0
16	MIFT	32	32	0	0
17	MTA	36	36	0	0
18	NOVI	39	39	0	0
19	PIT	36	36	0	0
20	PUT	27	27	0	0
21	RIZ	38	38	0	0
22	SOP	33	33	0	0
23	SUS	33	33	0	0
24	TAQ	27	53	-26	676
25	REV	36	48	-12	144
TOTAL				$\sum X = -11$	$\sum X^2 = 1149$

Table III above shows the difference score between pre-test and post-test at experimental class. The difference score is the results from post-test score subtract pre-test score. There is significant difference score between pre-test and post-test at experimental class, that is the biggest difference score is 26 and the lowest difference is 2. All of students increased in their scores.

Graphic 4.1

The graphic of Pre-test and Post-test of Experimental Class



Based on the graphic above, it can be seen that the result of lowest score in pre-test is 38 and the post-test is 64, and the highest score pre-test is 56 and post-test is 84. So, it mean there is increasing significantly between pre-test and post-test.

Table 4.4

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

NO	NAME	Pre-Test (y_1)	Post-Test (y_2)	Deviation ($Y=y_2-y_1$)	Squared Deviation (Y^2)
1	AH	53	84	-31	961
2	AND	63	84	-21	441

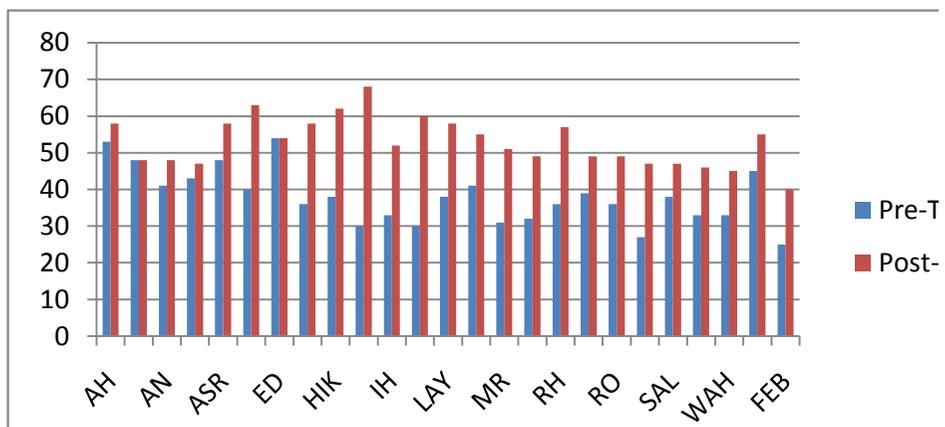
3	AN	43	69	-26	676
4	ANGG	43	74	-31	961
5	ASR	48	67	-19	361
6	DES	40	64	-24	576
7	ED	64	84	-20	400
8	FAI	36	58	-22	484
9	HIK	38	65	-27	729
10	IHF	30	69	-39	1521
11	IH	33	69	-36	1296
12	IK	30	69	-39	1521
13	LAY	38	64	-26	676
14	M.FA	41	79	-38	1444
15	MR	31	79	-48	2304
16	RAI	32	69	-37	1369
17	RH	36	79	-43	1849
18	RYAH	39	74	-35	1225
19	RO	36	71	-35	1225
20	SAH	27	76	-49	2401

21	SAL	38	69	-31	961
22	SUL	33	56	-23	529
23	WAH	33	69	-36	1296
24	FUD	27	71	-44	1936
25	FEB	36	78	-42	1764
TOTAL				$\sum Y = 822$	$\sum Y^2 = 28906$

Table IV above shows the difference score between pre-test and post-test at Control Class. The difference score is the results from post-test score subtract pre-test score. There is no significant difference score between pre-test and post-test at the control class, that is the highest difference score is 15 and the lowest difference is 5. All of students increased in their score.

Graphic 4.2

The Graphic of Pre-test and Post-test from control



Based on the graphic above, it can be seen that the result from control class. The lowest score from pre-test is 27 and the post-test is 38. The highest score from pre-test is 45 and post-test is 62. So, there is no increasing significantly between pre-test and post-test.

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

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

$$\begin{aligned} \text{MX} &= \frac{\sum X}{N} \\ &= \frac{1790}{25} \\ &= 71.6 \end{aligned}$$

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

$$\begin{aligned} \text{MY} &= \frac{\sum Y}{N} \\ &= \frac{1229}{25} \\ &= 53.43 \end{aligned}$$

3. Determining the total Square of Error of Experiment Class (X), through formula :

$$\begin{aligned} \sum X^2 &= \sum x^2 - \frac{(\sum x)^2}{N} \\ &= 1149 - \frac{(968)^2}{25} \\ &= 1149 - \frac{937024}{25} \\ &= 23200 - 37480 \\ &= 1428 \end{aligned}$$

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 she calculated the data based on the formula above.

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

$$\begin{aligned}\sum Y^2 &= \sum y^2 - \frac{(\sum y)^2}{N} \\ &= 28906 - \frac{(968)^2}{25} \\ &= 28906 - \frac{937024}{25} \\ &= 28906 - 37480 \\ &= 8574\end{aligned}$$

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 she calculated the data based on the formula above.

5. Calculates T-test

$$\begin{aligned}t &= \frac{Mx - My}{\sqrt{\left(\frac{\sum X^2 + \sum Y^2}{Nx + Ny - 2}\right)\left(\frac{1}{Nx} + \frac{1}{Ny}\right)}} \\ t &= \frac{71,6 - 53,43}{\sqrt{\left(\frac{1149 + 28906}{25 + 25 - 2}\right)\left(\frac{1}{25} + \frac{1}{25}\right)}} \\ t &= \frac{18,17}{\sqrt{\left(\frac{30055}{48}\right)\left(\frac{2}{25}\right)}} \\ t &= \frac{18,17}{\sqrt{(626,14)(0,08)}} \\ t &= \frac{18,17}{\sqrt{50,09}} \\ t &= \frac{18,17}{7,07} \\ t &= 2,57\end{aligned}$$

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

6. Determine the Degree of Freedom, with formula:

$$Df = N_x + N_y - 2$$

$$Df = 25 + 25 - 2$$

$$Df = 48$$

The result above shows about the score of sample both experiment and control class. The writer used 50 students as sample for research 25 students from VIII A as experimental class and 25 students from VIII b as control class.

Comparing “t” has been tested in calculating ($t_0 = 2.57$) and $df = 48$. There is no df (degree of freedom) for 48, so the writer used the closer “ df ” from 48, which has been tested on t-table ($t_{5\%} = 2,01$ and $t_{1\%} = 2,68$). It can be known that $t_0 > t_{5\%}$ and $t_0 > t_{1\%}$, it means $2,01 < 2.57 < 2,68$.

From the result of test (pre-test and post-test), the writer conclude that using Picture Series In Teaching procedure Text has effective significant on students learning. In control class there is no increasing significantly between pre-test and post-test because when the teacher did not used Picture Series In Teaching in classroom, it is did not give effective significant on students comprehension, but in experiment class, there is increasing significantly between pre-test and post-test because when teacher used Picture Series In Teaching in classroom, it is gave effective significant on students comprehension. It can be seen from result of pre-test and post-test of experiment class got increasing compared with control class.

C. Testing Hypothesis

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

$$H_a = t_0 > t_t$$

$$H_o = t_0 < t_t$$

Notes:

H_a = Alternative Hypothesis

H_o = Null Hypothesis

t_0 = The Value of t-observation

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 Picture Series In Teaching procedure text at VIII A as an experimental class and VIII B as a control class.

If $t_0 < t_t$: The alternative hypothesis is rejected. It means there is no significant effect by using Picture Series In Teaching procedure text at VIII A as an experimental class and VIII B as a control class.

From the result calculation above, the value of $t_0 = 2.57$ the degree of freedom (df) = 50. The writer used the degree of significant 5% = 2,01 and 1% = 2,68. It means that H_a (Alternative Hypothesis) of the research is accepted and H_o (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 $2,01 < 2.57 < 2,68$. It means (Alternative Hypothesis) of the research is accepted.

D. Discussion of Research Findings

The data showed that the mean of pre-test scores obtained by students of VIII A as an experimental class = 38,72 and pre-test scores obtained by students of VIII B as control class = 38.17 The highest score in two classes was different that was class VIII as an experimental class got 64 and VIII B as a control class got 54. The lowest score in both classes was 27 for experimental class and 27 for control class.

The mean of post-test, score of VIII A as experimental class = 71,6 was greater than VIII A as a control class = 53.43. The highest score post-test of VIII B as experimental class got 84 and VIII B as a control class got 68. The lowest post-test of experimental class 56 and the lowest post-test of control class 45.

By $df = 50$ and analyzed by using t-test, the writer tested that there is effect in using Picture Series In Teaching procedure text writing because t-count is higher than t-table in significant 5% and 1%. The t-table with significant level 5% is 2,01 and significant level 1% is 2,68.

In chapter II, the writer had explained about some theory relating with the effectiveness of using Picture Series In Teaching procedure text writing.

From the interpretation above $t\text{-count} > t\text{-table}$ means there is significance effect of Picture Series In Teaching procedure text writing.

Based on the data obtained from control class and experiment class among the description of data, data analysis, hypothesis testing, Interpretation of data. The writer concluded that Picture Series In

Teaching procedure text writing in MTs Al-Khairiyah Tambang Ayam
Anyer Serang Banten