CHAPTER IV
RESULT OF THE RESEARCH

A. Description of Data

In this chapter, the writer explains the result of the research. The writer took 65 students at eighth grade of MTs Daarul Ahsan Tangerang. The goal of the research is intended to find out the accurate data in accord with the research title. So the sample in this study divided into two classes. They are 32 students from class VIII A as the experiment class and 33 students from class VIII B as the control class.

Based on the result of the test, the writer got two data. The first data is the result of pre-test and second one is the result of post-test. The result of post-test in experimental class is named variable (X1) and the result of post-test in control class is named variable (X2). The score is as follow:

1. The Score of Pre-test and Post-test of Experimental Class

The students in VIII A Class as experimental class obtained mean score 9,4 for pre-test and 14,81 for post test. The score they got in these test would be described in following table:

Table 4.1

TheResult Score of Pre-test and Post-test in Experiment Class

No	Name	Score	
		Pre-test	Post-test
1	S1	6	11
2	S2	10	15
3	S3	6	10
4	S4	10	16
5	S5	5	8
6	S6	5	8
7	S7	11	18
8	S8	7	16
9	S9	12	19
10	S10	5	13
11	S11	6	17
12	S12	7	12
13	S13	14	17
14	S14	8	15
15	S15	12	18
16	S16	7	16
17	S17	9	9
18	S18	10	11
19	S19	10	16
20	S20	12	13
21	S21	8	14

22	S22	13	18
23	S23	9	12
24	S24	9	15
25	S25	11	14
26	S26	13	18
27	S27	11	17
28	S28	14	19
29	S29	14	18
30	S30	13	19
31	S31	6	15
32	S32	8	16
∑X1		301	474
M_1		9,4	14,81

Based on the data of students' pre test and post test score in experiment class, the researcher counted the average or mean score of them.

Mean by formula:

Pre-test

$$M_1 = \frac{\sum X1}{N_1}$$

$$M_1 = \frac{\sum 301}{32}$$

$$= 9,4$$

Post-test

$$M_1 = \frac{\sum X1}{N_1}$$

$$M_1 = \frac{\sum 474}{32}$$

$$= 14,81$$

Note:

$\sum X1$: The score of pre-test and post-test experiment class

M_1 : Mean of pre-test and post-test experiment class

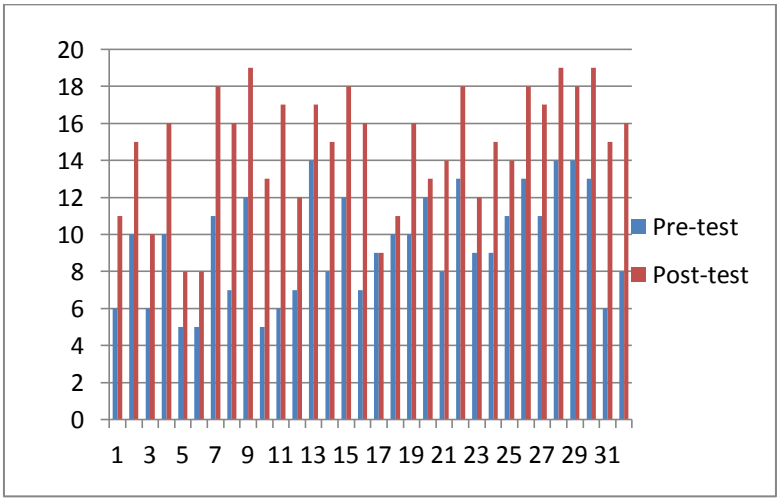
N_1 : Numbers of students of experiment class

Based on calculation on the table 4.1 of pre-test and post-test at experimental class, it showed that the result of experimental class got the significant improvement after giving treatment. It is seem from average score of post-test is better than the average score of pre-test that 14,81 > 9,4, it means that using Picture Word Inductive Model (PWIM) is success to increasing students' writing ability in descriptive text.

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

Graphic 4.1

TheResult Score of Pre-test and Post-test in Experiment Class



Based on graphic above, it showed about the comparison between score of pre-test and post-test at the experimental class. According to the graphic above the score of post test is better than score of pre-test commonly. It meant that the result of experimental class got the significant improvement after giving treatment.

2. The Score of Pre-test and Post-test of Control Class

The students in VIII B Class as control class obtained mean score 8,93 for pre-test and 11,27 for post test. The score they got in these test would be described in following table:

Table 4.2

The Score of Pre-test and Post-test in Control Class

No	Name	Score	
		Pre-test	Post-test
1	S1	10	14
2	S2	7	9
3	S3	10	12
4	S4	5	5
5	S5	12	14
6	S6	8	8
7	S7	12	14
8	S8	5	5

9	S9	6	6
10	S10	6	8
11	S11	8	10
12	S12	6	12
13	S13	12	15
14	S14	8	13
15	S15	5	7
16	S16	7	9
17	S17	9	13
18	S18	11	15
19	S19	11	16
20	S20	7	10
21	S21	7	12
22	S22	7	9
23	S23	9	13
24	S24	11	14
25	S25	14	15
26	S26	13	16
27	S27	14	15
28	S28	6	10
29	S29	8	11
30	S30	13	11
31	S31	11	12
32	S32	9	9
33	S33	8	10
∑X2		295	372

M_2	8,93	11,27

Based on the data of students' pre test and post test score in control class, the researcher counted the average or mean score of them.

Mean by formula :

Pre-test

$$M_2 = \frac{\sum X2}{N_2}$$

$$M_2 = \frac{\sum 295}{33}$$

$$= 8{,}93$$

Post-test

$$M_2 = \frac{\sum X2}{N_2}$$

$$M_2 = \frac{\sum 372}{33}$$

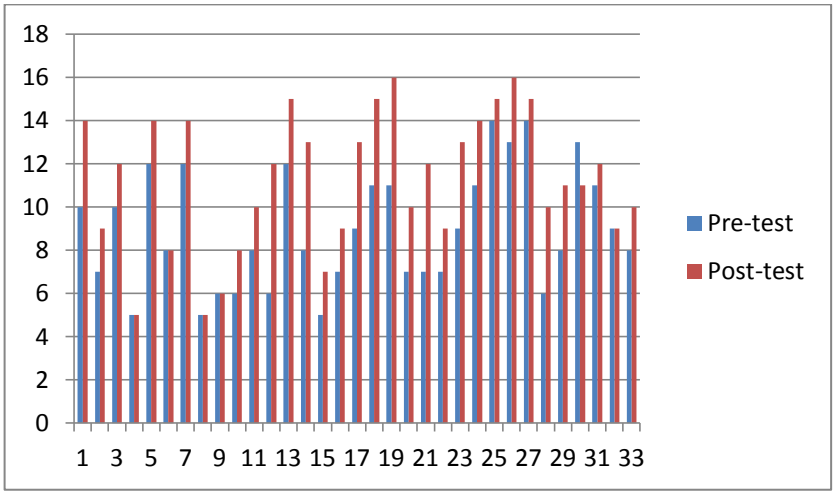
$$= 11{,}27$$

Based on calculation on the table 4.2 of pre-test and post-test at control class, it showed that the result of control class did not get the significant improvement. It is seem from average score of pre-test and post test that is 8,93 and 11,27. It caused the control class did not used Picture Word Inductive Model in learning teaching process in writing descriptive text.

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

Graphic 4.2

The Score of Pre-test and Post-test in Control Class



Based on graphic above, it showed about the comparison between score of pre-test and post-test at the experimental class. According to the graphic above the score of post test is better than score of pre-test commonly, but it showed that the result of control class did not have the significant improvement, It is seem from average score of post-test that is score of pre-test 8,93>11,27. This class also realized improvement but lower than experiment class.

B. DataAnalysis

After getting the data from pre-test and post-test score of two classes. Then the writer analyzed it by using t-test formula with the degree of significant 5% and 1%, the writer would described as following table and graphic:

Table 4.3

The Score of Distribution Frequency

No	Score		X_1	X_2	X_1^2	X_2^2
	X1	X2	(X1-M_1)	(X2-M_2)		
1	11	14	-3,81	2,73	14,51	7,45
2	15	9	0,19	-2,27	0,03	5,15
3	10	12	-4,81	0,73	23,13	0,53
4	16	5	1.19	-6,27	1,41	39,31
5	8	14	-6,81	2,73	46,37	7,45
6	8	8	-6,81	-3,27	46,37	10,69
7	18	14	3,19	2,73	10,17	7,45
8	16	5	1,19	-6,27	1,41	39,31
9	19	6	4,19	-5,27	17,55	27,77
10	13	8	-1,81	-3,27	3,27	10,69
11	17	10	2,19	-1,27	4,79	1,61
12	12	12	-2,81	0,73	7,89	0,53
13	17	15	2,19	3,73	4,79	13,91
14	15	13	0,19	1,73	0,03	2,99
15	18	7	3,19	-4,27	10,17	18,23

16	17	9	2,19	-2,27	4,79	5,15
17	9	13	-5,81	1,73	33,75	2,99
18	11	15	-3,81	3,73	14,51	13,91
19	16	16	1,19	4,73	1,41	22,37
20	13	10	-1,81	-1,27	14,51	1,61
21	14	12	-0,81	0,73	0,65	0,53
22	18	9	3,19	-2,27	10,17	5,15
23	12	13	-2,81	1,73	7,89	2,99
24	15	14	0,19	2,73	0,03	7,45
25	14	15	-0,81	3,73	0,65	13,91
26	18	16	3,19	4,73	10,17	22,37
27	17	15	2,19	3,73	4,79	13,91
28	19	10	4,19	-1,27	17,55	1,6
29	18	11	3,19	-0,27	10,17	0,07
30	19	11	4,19	-0,27	17,55	0,07
31	15	12	0,19	0,73	0,03	0,53
32	16	9	1,19	-2,27	1,41	5,15
33		10		-1,27		1,61
∑	474	372			341,92	314,45

Note:

X1 = Score Post-Test (Experiment Class)

X2 = Score Post-Test (Control Class)

X_1 = X1-M_1 (Mean X1)

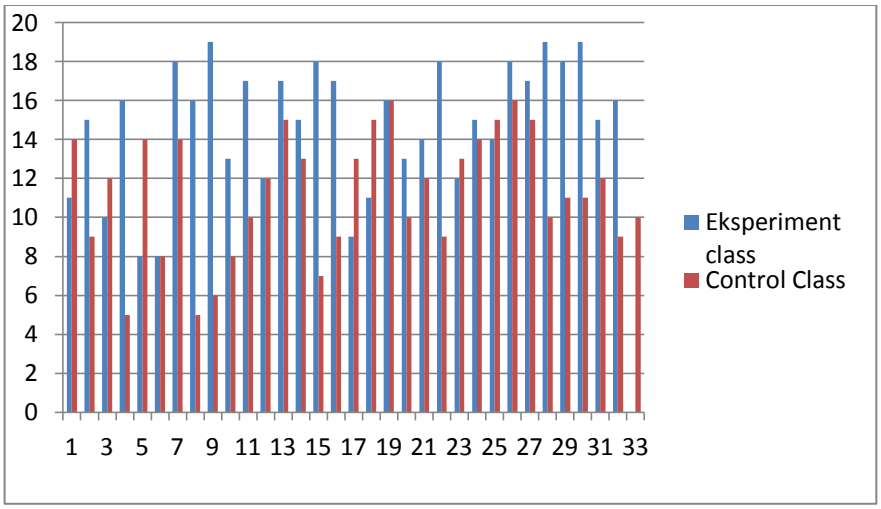
X_2 = X2-M_2 (Mean X2)

X_1^2 = The squared deviation of X_1

X_2^2 = The squared deviation of X_2

Graphic 4.3

The Score of Distribution Frequency



Based on the graphic above the experiment class= 474 that higher than control class= 372 was had different value. The experiment class higher than the control class.

From the table above, the writer got the data ∑X1=474, ∑X2=372, $\sum X_1^2$=341,92, and $\sum X_2^2$=314,45, where as N_1=32 and N_2=33.

After that the writer calculated them based the t-test formula:

1. Determine mean of variable X1 and X2

Variable X1	Variable X2
$M_1 = \frac{\sum X1}{N_1}$	$M_2 = \frac{\sum X2}{N_2}$
$M_1 = \frac{\sum 474}{32}$	$M_2 = \frac{\sum 372}{33}$
=14,81	=11,27

2. Sum of the squared deviation score of experimental class
   $\sum X_1^{2=}$ 341,92
3. Sum of the squared deviation score of control class
   $\sum X_2^{2=}$ 314,45
4. Degree of Freedom
   df = N1+N2-2
   = 32+33-2
   = 63

5. Determining t table (t_t) by formula:

$$t = \frac{M_1 - M_2}{\sqrt{\left\{\frac{\sum X_1^2 + \sum X_2^2}{N_1 + N_2 - 2}\right\}\left\{\frac{N_1 + N_2}{N_1.N_2}\right\}}}$$

$$t = \frac{14{,}81 - 11{,}27}{\sqrt{\left\{\frac{341{,}92 + 314{,}45}{32 + 33 - 2}\right\}\left\{\frac{32 + 33}{32.33}\right\}}}$$

$$t = \frac{3{,}54}{\sqrt{\left\{\frac{656{,}37}{63}\right\}\left\{\frac{65}{1.506}\right\}}}$$

$$t = \frac{3.54}{\sqrt{\{10{,}41\}\{0.06\}}}$$

$$t = \frac{3{,}54}{\sqrt{0{,}62}}$$

$$t = \frac{3{,}54}{0{,}78}$$

t = 4, 53

Note :

M_1 = The average score of experiment class (Mean X1)

M_2 = The average score of control class (Mean X2)

$\sum X_1^2$ =Sum of the squared deviation score experiment class

$\sum X_2^2$ = Sum of the squared deviation score of control class

N_1 = The number of student of experiment class

N_2 = The number of student of control class

2 = Constant number

From the result of the calculation above, it is obtained that the value of t_o (t observation) is 4,53. After getting the data, the writer compare with t_t(t table) both in degree 5% and 1%.

C. Hypothesis Testing

To prove it, the data obtained from experiment class and control class are calculated with the assumption as follow:

If $t_{observation} > t_{table}$:The alternative hypothesis is accepted. It means there is a significant influence of Picture Word Inductive Model (PWIM) in students' writing ability in descriptive text.

If $t_{observation} < t_{table}$: The alternative hypothesis is rejected. It means there is no significant influence of Picture Word Inductive Model (PWIM) in students' writing ability in descriptive text.

From the result of the calculation above, it is obtained that the value of t_o is 4,53, degree of freedom (df) is 63. There is no degree of freedom for 63, so the researcher used the closer df from 60. In degree of significance 5% from 60 (t table) =2,00, in degree significance 1% from 60 (t table) =2,65.

After that the data, the writer compared it with t_t(t table)both in degree 5% and 1%. Therefore, t_o :t_t= 4,53 > 2,00 in degree of 5% and $t_o > t_t$ = 4,53 >2 ,56 in degree of significance 1%.

The statistic hypothesis stated that if t_o higher than t_t, it showed that Ha (alternative hypothesis) of the result was accepted and H_o (null hypothesis) was rejected. It means there is the influence of teaching writing descriptive text between using Picture Word Inductive Model and without Picture Word Inductive Model.

D. Interpretation of Data

In the class VIII A as experiment class, the highest score of pre-test is 14 and the lowest score is 5. The highest score of post-test is 19 and the lowest score is 8. The mean of pre test score obtained by students in this class is 9,4, and the mean of post test is 14,81 . The mean of pre test and post test score has good significant improvement, it seen by 14,81>9,4. The improvement is caused by the experiment class have learned writing descriptive text by using Picture Word Inductive Model that not used by teacher before.

In the class VIII B as control class, the highest score of pre test is 14 and the lowest score is 5. The highest score of post-test is 16 and the lowest score is 5. The mean of pre test score obtained by students in this class is 8,93, and the mean of post test is 11,27. There is no significant improvement of the result in this class. It caused by the control class did not learn writing descriptive text by using Picture Word Inductive Model.