

CHAPTER IV

RESULT AND DISCUSSION

A. Data Description

In this chapter, the researcher would like to present the description of data obtained. The research is only directed to the students of the third grade of Al-Mu'min Pandeglang. The writer divided them into two groups, 30 students as experimental class, it is from class IX C, and 30 students as control class, it is from class IX B, this research had been carried through four steps. They involve pre-test, two times treatment and post-test. The goal of the research is intended to prove the accurate data in accordance with the research title.

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

Table 4.1

The result Score of Pre-test and Post-test Experimental Class

No	Name	SCORE											
		PRE-TEST (X ₁)						POST-TEST (X ₂)					
		MI	SI	I	R	V	Rst	MI	SI	I	R	V	Rst
1.	AM	20	17,5	15	20	2,5	75	12,5	2,5	20	25	10	90
2.	AK	15	12,5	25	15	7,5	75	22,5	20	25	12,5	10	90
3.	DA	20	15	12,5	20	2,5	70	12,5	12,5	20	30	10	85
4.	FDH	2,5	15	10	5	2,5	35	12,5	15	2,5	20	15	65
5.	IH	25	12,5	10	7,5	10	65	15	25	7,5	12,5	25	85
6.	KW	10	10	5	15	5	45	12,5	7,5	25	10	15	70
7.	KB	12,5	20	15	10	2,5	60	25	30	10	15	5	85
8.	SND	20	7,5	15	25	2,5	70	22,5	12,5	20	25	10	90

9.	SNH	17,5	10	2,5	10	5	45	7,5	15	20	22,5	10	75
10.	SNL	22,5	10	15	20	2,5	70	12,5	7,5	15	25	25	85
11.	SA	25	10	2,5	20	7,5	65	22,5	15	20	12,5	10	80
12.	RPS	50	15	5	2,5	2,5	75	10	22,5	30	25	7,5	95
13.	MFJ	15	22,5	15	15	2,5	70	35	15	25	10	10	90
14.	SM	7,5	15	2,5	15	5	45	17,5	20	15	7,5	15	75
15.	MS	15	12,5	12,5	15	10	65	27,5	7,5	15	25	10	85
16.	MSA	22,5	20	15	7,5	5	70	20	22,5	25	15	7,5	90
17.	MY	17,5	15	15	7,5	10	65	30	25	7,5	12,5	10	85
18.	MAZ	10	2,5	7,5	15	5	40	22,5	15	20	7,5	5	70
19.	MB	12,5	15	15	2,5	10	55	12,5	2,5	25	25	10	75
20.	NY	20	12,5	15	15	2,5	65	22,5	12,5	25	15	5	80
21.	RS	12,5	5	15	5	2,5	40	37,5	2,5	10	5	5	60
22.	RMG	22,5	10	20	15	7,5	75	50	2,5	7,5	25	10	95
23.	MFH	20	12,5	2,5	15	10	60	12,5	25	20	12,5	10	80
24.	RSF	12,5	20	10	7,5	10	60	35	20	15	10	5	80
25.	AJ	22,5	15	2,5	20	5	65	22,5	12,5	25	20	5	85
26.	RZN	12,5	20	15	7,5	5	60	12,5	22,5	10	20	10	75
27.	NB	25	12,5	10	10	2,5	50	42,5	7,5	15	10	5	80
28.	FW	20	12,5	15	15	2,5	65	30	25	7,5	12,5	10	85
29.	AF	15	25	12,5	7,5	10	70	37,5	15	20	2,5	10	85
30.	SIN	15	22,5	10	15	2,5	65	12,5	25	7,5	30	5	80
ΣXI		1835						2450					
MI		61,1						181,6					

Note:

MI = Main Idea

SI = Specific Information

I = Inference

R = Reference

V = Vocabulary

Rst = Result

Mean by formula:

Pre-test

$$M_1 = \frac{\sum x_1}{N_1}$$

$$M_1 = \frac{\sum 1835}{30}$$

$$= 61,1$$

Post-test

$$M_2 = \frac{\sum x_2}{N_2}$$

$$M_2 = \frac{\sum 2450}{30}$$

$$= 81,6$$

Note:

$\sum X_1$: The score of pre-test experimental class

$\sum X_2$: The score of post-test experimental class

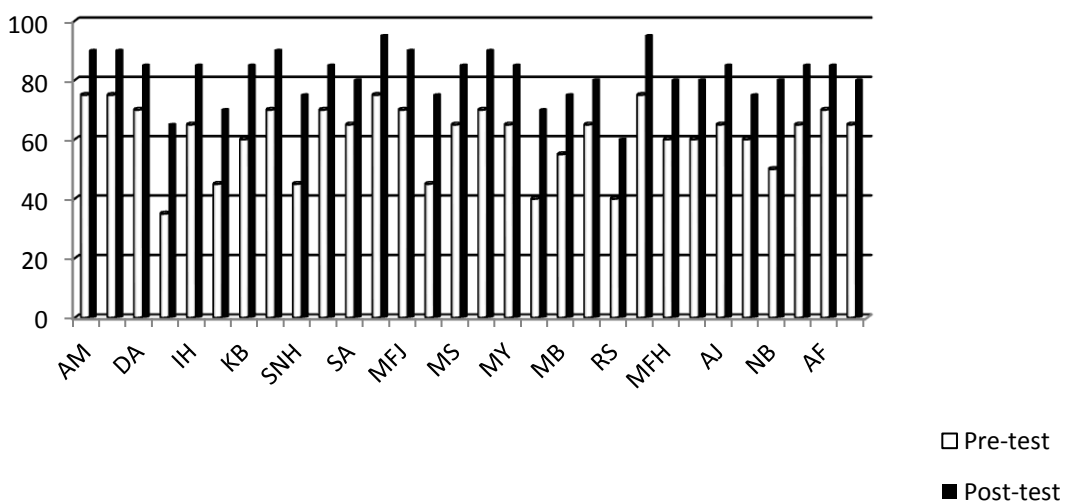
M_1 : Mean of pre-test experimental class

M_2 : Mean of post-test experimental class

N_1 : Numbers of students of experimental class

Graphic 4.1

The Score in Pre-test and Post-test in Experimental Class



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

Table 4.2

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

No	Name	SCORE											
		PRE-TEST (Y ₁)						POST-TEST (Y ₂)					
		MI	SI	I	R	V	Rst	MI	SI	I	R	V	Rst
1.	MCH	20	15	12,5	2,5	10	60	10	17,5	12,5	20	10	70
2.	MAZ	20	12,5	2,5	10	5	50	17,5	10	12,5	10	10	60
3.	SM	30	15	2,5	12,5	10	70	25	17,5	22,5	10	5	80
4.	AFQ	25	2,5	12,5	15	5	60	32,5	5	17,5	10	5	70
5.	IDK	20	20	25	5	5	75	12,5	12,5	30	25	5	85
6.	AKH	2,5	32,5	15	10	5	65	15	32,5	12,5	10	5	75
7.	YH	17,5	5	12,5	25	10	70	30	25	5	10	5	75
8.	MSA	10	27,5	2,5	10	10	60	25	2,5	12,5	15	10	65
9.	DA	10	2,5	12,5	15	5	45	12,5	20	2,5	25	10	70
10.	AS	25	15	10	10	10	70	30	25	10	5	5	75
11.	ANM	10	20	15	30	5	80	25	30	15	5	5	80
12.	SNB	10	15	2,5	7,5	10	45	35	2,5	12,5	10	5	65
13.	NMQ	17,5	22,5	2,5	2,5	10	55	22,5	15	10	12,5	10	70
14.	NJS	2,5	30	10	12,5	10	60	15	25	10	10	10	75
15.	RKN	32,5	2,5	10	5	10	60	25	25	10	5	5	70
16.	NFR	22,5	12,5	5	10	5	55	35	10	2,5	12,5	10	70
17.	MSF	2,5	2,5	25	10	10	50	12,5	2,5	20	25	10	70
18.	AK	10	2,5	2,5	25	10	50	15	20	2,5	12,5	10	60
19.	NA	25	2,5	5	12,5	10	55	15	17,5	12,5	20	5	70
20.	RO	10	15	12,5	20	10	50	25	12,5	2,5	25	5	70
21.	ANR	15	12,5	20	20	2,5	65	32,5	5	15	12,5	5	70
22.	HIM	17,5	15	20	2,5	5	60	40	15	2,5	12,5	10	80
23.	TNR	15	2,5	2,5	25	10	55	2,5	15	5	32,5	5	60
24.	MM	30	2,5	12,5	15	5	65	15	10	15	25	10	75
25.	STA	12,5	2,5	20	15	10	60	15	20	25	10	10	80
26.	INS	12,5	10	15	12,5	5	55	35	2,5	12,5	10	5	65
27.	AHF	20	2,5	12,5	15	10	60	10	15	10	25	10	70
28.	SFA	15	10	2,5	12,5	10	50	35	10	15	20	5	85
29.	WRS	25	2,5	12,5	10	5	55	15	10	20	25	10	80
30.	SPA	2,5	2,5	12,5	22,5	10	50	12,5	25	2,5	15	10	65

ΣXI	1730	2155
MI	57,6	71,8

Note:

MI = Main Idea

SI = Specific Information

I = Inference

R = Reference

V = Vocabulary

Rst = Result

Mean by formula:

Pre-test

$$M_1 = \frac{\Sigma y_1}{N_1}$$

$$M_1 = \frac{\Sigma 1730}{30}$$

$$= 57,6$$

Post-test

$$M_2 = \frac{\Sigma y_2}{N_2}$$

$$M_2 = \frac{\Sigma 2155}{30}$$

$$= 71,8$$

Note:

$\sum Y_1$: The score of pre-test control class

$\sum Y_2$: The score of post-test control class

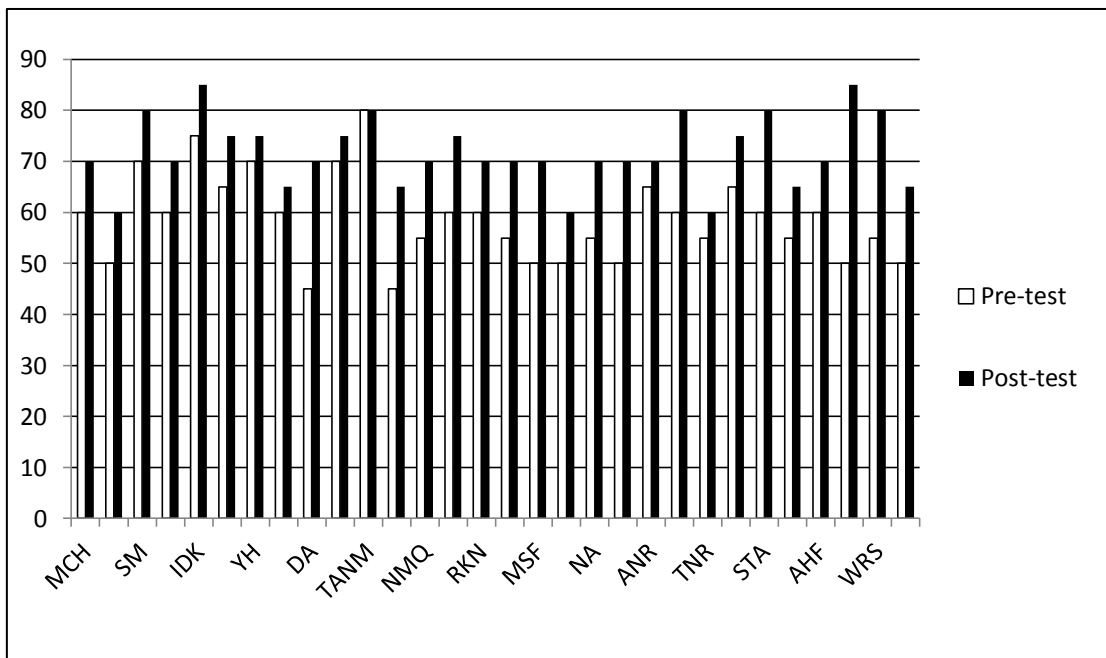
M_1 : Mean of pre-test control class

M_2 : Mean of post-test control class

N_1 : Numbers of students of control class

Graphic 4.2

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



Based on graphic above, it showed that the result of control class did not have the significant improvement, it is seemed from average score of post-test that is score of pre-test 71,8 > 57,6. This class also realized can effect improvement but lower than experimental class.

B. Analysis of Data

After getting the data from pre-test and post-test score of two classes. Than the researcher analyzed it by using t-test formula with the degree of significant 5% and 1% the writer used step as follows:

Table 4.3

The Score of Distribution Frequency

No	SCORE		x_1	y_2	x_1^2	y_1^2
	X1 Post-test Experimental class	Y1 Post-test Control class	($XI-M_1$)	($Y1-M_2$)		
1.	90	70	8.4	-1.8	70.56	3.24
2.	90	60	8.4	-11.8	70.56	139.24
3.	85	80	3.4	8.2	11.56	67.24
4.	65	70	-16.6	-1.8	275.56	3.24
5.	85	85	3.4	13.2	11.56	174.24
6.	70	75	-11.6	3.2	134.56	10.24
7.	85	75	3.4	3.2	11.56	10.24
8.	90	65	8.4	-6.8	70.56	46.24
9.	75	70	-6.6	-1.8	43.56	3.24
10.	85	75	3.4	3.2	11.56	10.24
11.	80	80	-1.6	8.2	2.56	67.24
12.	95	65	13.4	-6.8	179.56	46.24

13.	90	70	8.4	-1.8	70.56	3.24
14.	75	75	-6.6	3.2	43.56	10.24
15.	85	70	3.4	-1.8	11.56	3.24
16.	90	70	8.4	-1.8	70.56	3.24
17.	85	70	3.4	-1.8	11.56	3.24
18.	70	60	-11.6	-11.8	134.56	139.24
19.	75	70	-6.6	-1.8	43.56	3.24
20.	80	70	-1.6	-1.8	2.56	3.24
21.	60	70	-21.6	-1.8	466.56	3.24
22.	95	80	13.4	8.2	179.56	67.24
23.	80	60	-1.6	-11.8	2.56	139.24
24.	80	75	-1.6	3.2	2.56	10.24
25.	85	80	3.4	8.2	11.56	67.24
26.	75	65	-6.6	-6.8	43.56	46.24
27.	80	70	-1.6	-1.8	2.56	3.24
28.	85	85	3.4	13.2	11.56	174.24
29.	85	80	3.4	8.2	11.56	67.24
30.	80	65	-1.6	-6.8	2.56	46.24
Σ	2450	2155			2324.8	1374.2
AVERAGE						

Note:

X_1 = Score Post-Test (Experimental Class)

Y_1 = Score Post-Test (Control Class)

x_1 = $X_1 - M_1$ (Mean X_1)

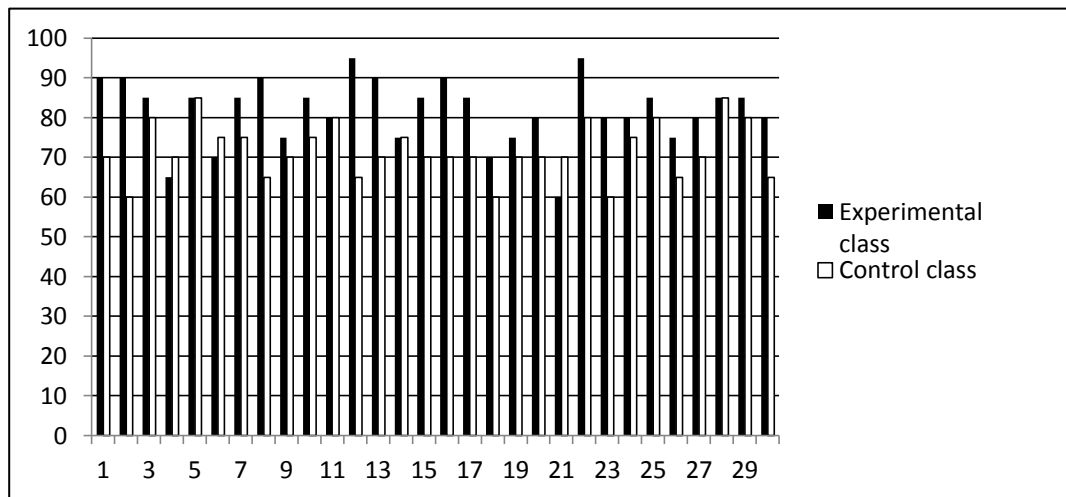
y_1 = $Y_1 - M_2$ (Mean Y_1)

x_1^2 = The squared value of X_1

y_1^2 = The squared value of Y_1

Graphic 4.3

The Score of Distribution Frequency



1. Determine mean of variable X1 and X2

Variable X1

Post-test

$$M_1 = \frac{\sum x_1}{N_1}$$

$$M_1 = \frac{\sum 2450}{30}$$

$$= 81,6$$

Variable Y1

Post-test

$$M_2 = \frac{\sum y_1}{N_2}$$

$$M_2 = \frac{\sum 2155}{30}$$

$$= 71,8$$

2. Determine t-test

$$t_o = \frac{M_1 - M_2}{\sqrt{\left\{ \frac{\sum X_1^2 + \sum Y_1^2}{N_1 + N_2 - 2} \right\} \left\{ \frac{N_1 + N_2}{N_1 \cdot N_2} \right\}}}$$

$$t_o = \frac{81,6 - 71,8}{\sqrt{\left\{ \frac{2324,8 + 1374,2}{30 + 30 - 2} \right\} \left\{ \frac{30 + 30}{30 \cdot 30} \right\}}}$$

$$t_o = \frac{9,8}{\sqrt{\left\{\frac{3699}{58}\right\}\left\{\frac{60}{900}\right\}}}$$

$$t_o = \frac{9,8}{\sqrt{\{63,77586207\}\{0,066666667\}}}$$

$$t_o = \frac{9,8}{\sqrt{4,251724159}}$$

$$t_o = \frac{9,8}{2,06}$$

$$t_o = 4.75$$

Note:

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

M_2 = The average score of control class (Mean Y1)

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

$\sum y_1^2$ = Sum of the squared deviation score of control class

N_1 = The number of student of experimental class

N_2 = The number of student of control class

2 = Constant number

3. Degree of Freedom

$$df = N_1 + N_2 - 2$$

$$= 30 + 30 - 2$$

$$= 58$$

There is no degree of freedom for 58, so the researcher uses the closer df from 58. In degree of significance 5% from 58 $t_{\alpha} = 2.00$ and in degree of significance 1% from 58 $t_{\alpha} = 2.66$.

Based on the result statistic calculation, it is obtained that the score of t_o is $= 4.75 > t_{\alpha} = 2.00$ in degree of significance 5%. The score of $t_o = 4.75 > t_{\alpha} = 2.66$ in degree of significance 1%. To prove the hypothesis, the data obtained from the experimental class is calculated by using t-test formula with assumption as follow:

If $t_{\text{observation}} > t_{\text{table}}$: The alternative hypothesis is accepted. It means there is a significant effect of Questioning the Author towards students' reading comprehension at the third grade of SMP Al-Mu'min Pandeglang.

If $t_{\text{observation}} < t_{\text{table}}$: The Null hypothesis is rejected. It means there is no significant effect of Questioning the Author towards students' reading comprehension at the third grade of SMP Al-Mu'min Pandeglang.

C. Interpretation of Data

From the result of pre-test and post-test in experimental class, the researcher can be concluded that from the lowest score in pre-test is 35 and the highest in pre-test score is 75. After the writer conducted treatment of Inference Prompter Chart in teaching reading comprehension on narrative text and also

conducted post-test. The lowest score in post-test is 60 and the highest score in post-test is 95.

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

- a. $H_a: t_{\text{observation}} > t_{\text{table}}$ = It means there is a significant effectiveness of Questioning the Author in teaching reading comprehension on narrative text.
- b. $H_o: t_{\text{observation}} < t_{\text{table}}$ = It means there is no significant effectiveness of Questioning the Author in teaching reading comprehension on narrative text.

According to the data, the value of $t_{\text{observation}}$ is bigger than t_{table} . $t_{\text{observation}} = 4.75 > t_{\text{table}} = 2.00$ (5%) or $t_{\text{observation}} = 4.75 > t_{\text{table}} = 2.00$ (1%), so H_o is rejected and H_a is accepted.

From the result above, the researcher give conclusion that it means there is a significant effectiveness of Questioning the Author in teaching reading comprehension on narrative text. It can be seen that the student got better score by Questioning the Author. This could be seen after comparing the score of pre-test (Questioning the Author) and post-test (after using Questioning the Author).

Based on the data obtained from control and experimental class among the average scores, and t observation, the writer summarizes that teaching narrative text through Questioning the Author has significant effectiveness

toward students' reading comprehension because the purpose of this technique Questioning the Author was to create a learning atmosphere in more engaging and creative way. Where students read more and enjoy it more, they will become better readers. Beside that the students please be understand between contents and what they read.

The result of the research shows that the experimental class (the students who are taught using Questioning the Author) has the mean value (81,6), meanwhile the control class (the students who are not taught using Inference Prompter Chart) has the mean value (71,8). It can be said that the achievement score of experimental class is higher than control class. The following was the table of pre-test and post-test students' average score.

Table 4.4

The Pre-Test and Post Test Students' Average of the Experimental and Control Class

Class	The Average of Pre-Test	The Average of Post-Test
Experimental	61,1	81,6
Control	57,6	71,8

So, it could be concluded that Questioning the Author is effective to facilitate students' reading comprehension on narrative text in experimental group. It can be seen at mean value of both groups. There is significant difference in the students' reading comprehension between experimental and control group.

Questioning the Author more effective than other because of the Questioning the Author, students' are more familiar with a text given by the students'. Where with this method, students' will predict an event contained in the text and they also learn how to make inference of the event, then students' understand a text with carefully.

Questioning the Author also can be quite personally rewarding for both students and educators. Readers are often asked to interact with the literal meanings on the pages, but inference requires that each reader consider her own beliefs, values, and experiences before drawing conclusions.