CHAPTER IV

RESULT AND DISCUSSION

A. Data Description

In this chapter, the researcher would like to present the description of data obtained. The sample of this study was of eighth grade of Riyadul Mubtadiin Pandeglang. The writer divided them into two groups, the first group was experimental class it was VIII A it consists of 32 students. Meanwhile, for control class was VIII B it has 32 students. More over having taken the data, the researcher analysed and interpret the data through the following steps.

The following will be given the data of pot-test from experimental class.

Table 4.1

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

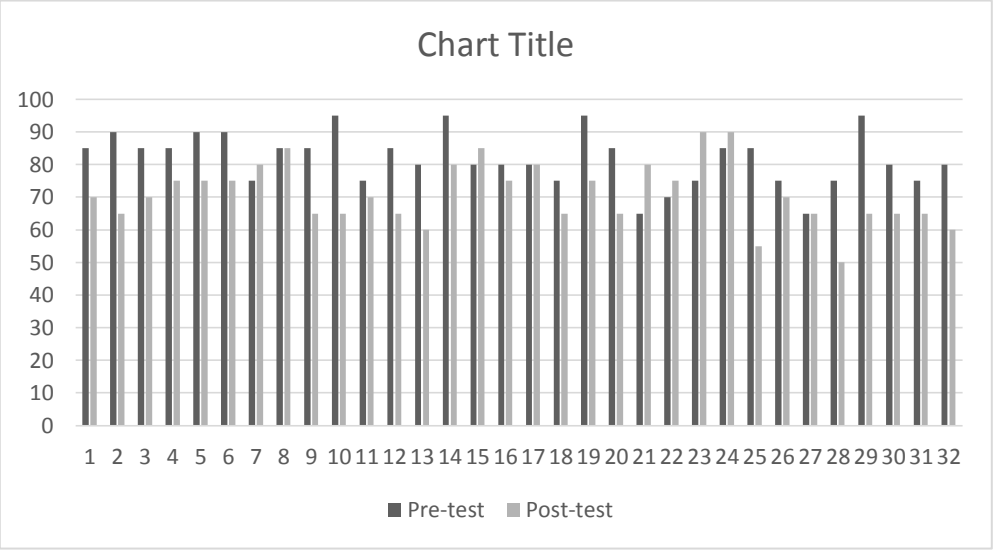
SCORE						
No	Name	Main Idea	General Information	Comprehending	Grammar	Vocabulary
		PRE-TEST (X_1)		**POST-TEST** (X_2)		
1	AMR	65		85		
2	AAD	60		90		
3	ASA	60		85		

4	BUL	60	85
5	CFF	65	90
6	FFS	65	90
7	HTS	40	75
8	IYR	70	85
9	IFT	65	85
10	MSB	70	95
11	MMN	45	75
12	MAF	60	85
13	MDD	55	80
14	MFA	70	95
15	MFH	65	80
16	MNM	60	80
17	NSH	55	80
18	NZN	55	75
19	NAP	65	95
20	PMR	45	85
21	RFY	40	65
22	RR	40	70

23	RTN	60	75
24	RSS	70	85
25	RK	70	85
26	RF	65	75
27	RBH	45	65
28	SM	50	75
29	SMS	70	95
30	STR	60	80
31	SRR	65	75
32	WWS	65	80
Σx_1		1895	2620
M1		59,21	81,87

Graphic 4.1

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



The following will be given the data of pot-test from Control class.

Table 4.2

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

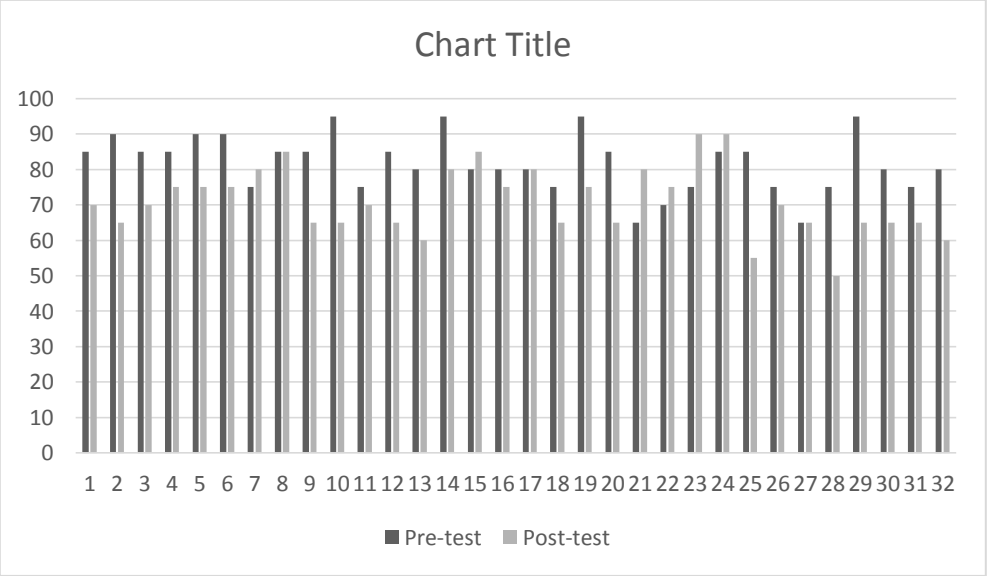
		SCORE				
No	Name	Main Idea	General Information	Comprehending	Grammar	vocabulary
		PRE-TEST (X_1)		**POST-TEST** (X_2)		
1	WA	65		70		
2	SDW	40		65		
3	EA	40		70		

4	DPH	45	75
5	MY	45	75
6	RF	50	75
7	WAT	55	80
8	DAF	55	85
9	SAN	60	65
10	HNP	60	65
11	IDW	45	70
12	KML	45	65
13	FTH	40	60
14	IDH	60	80
15	AL	65	85
16	SS	55	75
17	RF	70	80
18	RTH	45	65
19	MAT	65	75
20	KFT	55	65
21	HSSD	60	80
22	SZK	65	75

23	RR	70	90
24	HLW	75	90
25	FTA	50	55
26	SDS	65	70
27	AFR	60	65
28	NAA	55	50
29	JH	45	65
30	DSI	40	65
31	MY	45	65
32	NKW	55	60
Σx_1		1744	2275
M1		54,4	70,09

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 pre-test 70,09 > 54,4. This class also realized can effect improvement but lower than experimental class.

B. Normality Test

Normality test is used to show that the sample data come from populations which have normal distribution. In this study, the writer used Lilliefors method to test normality data of post-test from experiment and control group. The below table illustrates the result of normality test as follows:

Table 4.3

The result of Post-test from Experimental Class and Control Class

NO	Participant	Experimental Class	Control Class
1	Student 1	85	70
2	Student 2	90	65
3	Student 3	85	70
4	Student 4	85	75
5	Student 5	90	75
6	Student 6	90	75
7	Student 7	75	80
8	Student 8	85	85
9	Student 9	85	65
10	Student 10	95	65
11	Student 11	75	70
12	Student 12	85	65
13	Student 13	80	60
14	Student 14	95	80
15	Student 15	80	85
16	Student 16	80	75

17	Student 17	80	80
18	Student 18	75	65
19	Student 19	95	75
20	Student 20	85	65
21	Student 21	65	80
22	Student 22	70	75
23	Student 23	75	90
24	Student 24	85	90
25	Student 25	85	55
26	Student 26	75	70
27	Student 27	65	65
28	Student 28	75	50
29	Student 29	95	65
30	Student 30	80	65
31	Student 31	75	65
32	Student 32	80	60
		2620	2275
		81,87	70,09

From the data above, the writer made additional table deviation from experimental class as follows:

Table: 4.4

Assistant Table for Experimental Class

Respondent	**X**	**F**	**FX**	**XI**	**X^2**	**FX^2**
1	65	2	130	-16.8	282.24	564.48
2	70	1	70	-11.8	139.24	139.24
3	75	7	525	-6.8	46.24	323.68
4	80	6	480	-1.8	3.24	19.44
5	85	9	765	3.1	9.61	86.49
6	90	3	270	8.1	65.61	196.83
7	95	4	380	13.1	171.61	686.44
	Total	**32**	**2620**			**2016.6**
	π		**81.87**			
	SD		**7.9**			

Having obtained the data more over the researcher determined mean of experimental group by using formula as follows:

$$X = \frac{\Sigma FX}{\Sigma F}$$

$$X = \frac{2620}{32} = 81.87$$

Next, the researcher counted standard deviation of experimental Class by using formula as follows:

$SD = \underline{2016.6}$

32

$SD = 63.01 = 7.9$

The researcher made additional table deviation from Control class as follows:

Table: 4.5

Assistant Table for Control Class

Respondent	X	F	FX	XI	X2	FX2
1	50	1	50	-20.09	403.60	403.60
2	55	1	55	-15.09	227.70	227.70
3	60	2	120	-10.09	101.80	203.6
4	65	10	650	-5.09	25.90	259
5	70	4	280	-0.09	0.00	0
6	75	6	450	4.91	24.10	144.6
7	80	4	320	9.91	98.20	392.8
9	85	2	170	14.91	222.30	444.6
10	90	2	180	19.91	396.40	792.8
	Total	**32**	**2275**			**2868.7**
	π		**70.09**			
	SD		**9.4**			

Determining mean of Control class by using formula as follows:

$X = \underline{\Sigma FX}$

ΣF

$$X = \frac{2275}{32} = 70.09$$

Counting standard deviation of experiment group by using formula as follows:

$$SD = \frac{2868.7}{32}$$

$$SD = 89.64 = 9.4$$

Having obtained mean score and standard of deviation the researcher test normality of the data to make the researcher easy to analyse and to interpret the data, the researcher proved the table as follows:

Table: 4.6

Normality Test of Experimental Class

No	X1	Z	F (z)	S (z)	(F(z) - S(z))
1	65	-2.13	0.0166	0.03	-0.0134
2	65	-2.13	0.0166	0.06	0.0434
3	70	-1.5	0.0668	0.09	0.0232
4	75	-0.86	0.1949	0.12	0.0749
5	75	-0.86	0.1949	0.15	0.0449
6	75	-0.86	0.1949	0.18	0.0149
7	75	-0.86	0.1949	0.21	-0.0151
8	75	-0.86	0.1949	0.25	-0.0551

9	75	-0.86	0.1949	0.28	-0.0851
10	75	-0.86	0.1949	0.31	-0.1151
11	80	-0.23	0.409	0.34	0.069
12	80	-0.23	0.409	0.37	0.039
13	80	-0.23	0.409	0.40	0.009
14	80	-0.23	0.409	0.43	-0.021
15	80	-0.23	0.409	0.46	-0.051
16	80	-0.23	0.409	0.5	-0.091
17	85	0.39	0.3483	0.53	**-0.1817**
18	85	0.39	0.3483	0.56	-0.2117
19	85	0.39	0.3483	0.59	-0.2417
20	85	0.39	0.3483	0.62	-0.2717
21	85	0.39	0.3483	0.65	-0.3017
22	85	0.39	0.3483	0.68	-0.3317
23	85	0.39	0.3483	0.71	-0.3617
24	85	0.39	0.3483	0.75	-0.4017
25	85	0.39	0.3483	0.78	-0.4317
26	90	1.02	0.1539	0.81	-0.6561
27	90	1.02	0.1539	0.84	-0.6861
28	90	1.02	0.1539	0.87	-0.7161
29	95	1.66	0.0485	0.90	-0.8515
30	95	1.66	0.0485	0.93	-0.8815
31	95	1.66	0.0485	0.96	-0.9115
32	95	1.66	0.0485	1	-0.9515

Determining Z score by using formula as follows:

$$Z = \frac{X1 - X}{SD}$$

$$SD = \frac{65 - 81.87}{7.9} = -2.13$$

Having obtained mean score and standard of deviation the researcher test normality of the data to make the researcher easy to analyse and to interpret the data, the researcher proved the table as follows:

Table: 4.7

Normality Test of Control Class

No	X1	Z	F (z)	S (z)	(F(z) - S(z))
1	50	-2.13	0.0166	0.03	-0.0134
2	55	-1.60	0.0548	0.06	-0.0052
3	60	-1.07	0.1423	0.09	0.0523
4	60	-1.07	0.1423	0.12	0.0223
5	65	-0.54	0.2946	0.15	0.1446
6	65	-0.54	0.2946	0.18	0.1146
7	65	-0.54	0.2946	0.21	0.0846
8	65	-0.54	0.2946	0.25	0.0446
9	65	-0.54	0.2946	0.28	0.0146
10	65	-0.54	0.2946	0.31	-0.0154
11	65	-0.54	0.2946	0.34	-0.0454
12	65	-0.54	0.2946	0.37	-0.0754
13	65	-0.54	0.2946	0.40	-0.1054

14	65	-0.54	0.2946	0.43	-0.1354
15	70	-0.00	0.05	0.46	-0.41
16	70	-0.00	0.05	0.5	-0.45
17	70	-0.00	0.05	0.53	**-0.48**
18	70	-0.00	0.05	0.56	-0.51
19	75	0.52	0.3015	0.59	-0.0288
20	75	0.52	0.3015	0.62	-0.3185
21	75	0.52	0.3015	0.65	-0.3484
22	75	0.52	0.3015	0.68	-0.3785
23	75	0.52	0.3015	0.71	-0.4085
24	75	0.52	0.3015	0.75	-0.4485
25	80	1.05	0.1469	0.78	-0.6331
26	80	1.05	0.1469	0.81	-0.6931
27	80	1.05	0.1469	0.84	-0.7231
28	80	1.05	0.1469	0.87	-0.8429
29	85	1.58	0.0571	0.90	-0.8729
30	85	1.58	0.0571	0.93	-0.9426
31	90	2.11	0.0174	0.96	-0.9826.
32	90	2.11	0.0174	1	-0.9826

More over to obtained the Z score the researcher use by formula as follows:

$$Z = \frac{X1 - X}{SD}$$

$$SD = \frac{50 - 70.09}{9.4} = -2.13$$

Next, The researcher made additional table calculation from experimental class and Control class as follows:

Table 4.8

The Calculation Scores of Experiment and Control Class

No	SCORE		X_1	Y_2	X_1^2	Y_1^2
	X1	X2	(X1-M_1)	(Y1-M_2)		
1	85	70	3.13	-0.09	9.7969	0.0081
2	90	65	8.13	-5.09	66.0969	25.9081
3	85	70	3.13	-0.09	9.7969	0.0081
4	85	75	3.13	4.91	9.7969	24.1081
5	90	75	8.13	4.91	66.0969	24.1081
6	90	75	8.13	4.91	66.0969	24.1081
7	75	80	-6.87	9.91	47.1969	98.2081
8	85	85	3.13	14.91	9.7969	222.308
9	85	65	3.13	-5.09	9.7969	25.9081
10	95	65	13.13	-5.09	172.397	25.9081
11	75	70	-6.87	-0.09	47.1969	0.0081
12	85	65	3.13	-5.09	9.7969	25.9081
13	80	60	-1.87	-10.09	3.4969	101.808
14	95	80	13.13	9.91	172.397	98.2081
15	80	85	-1.87	14.91	3.4969	222.308
16	80	75	-1.87	4.91	3.4969	24.1081
17	80	80	-1.87	9.91	3.4969	98.2081
18	75	65	-6.87	3.13	47.1969	9.7969

19	95	75	13.13	4.91	172.397	24.1081
20	85	65	3.13	3.13	9.7969	9.7969
21	65	80	-16.87	9.91	284.597	98.2081
22	70	75	-11.87	4.91	140.897	24.1081
23	75	90	-6.87	19.91	47.1969	396.408
24	85	90	3.13	19.91	9.7969	396.408
25	85	55	3.13	-15.09	9.7969	227.708
26	75	70	-6.87	-0.09	47.1969	0.0081
27	65	65	-16.87	3.13	284.597	9.7969
28	75	50	-6.87	-20.09	47.1969	403.608
29	95	65	13.13	3.13	172.397	9.7969
30	80	65	-1.87	3.13	3.4969	9.7969
31	75	65	-6.87	3.13	47.1969	9.7969
32	80	60	-1.87	-10.09	3.4969	101.808
Σ	**2620**	**2275**			**2037.5**	**2772.29**
AVERAGE	**81,87**	**70,09**				

Note:

X1 = Score Post-test (Experimental Class)

Y1 = Score Post-test (Control Class)

X_1 = X1-M_1 (Mean X1)

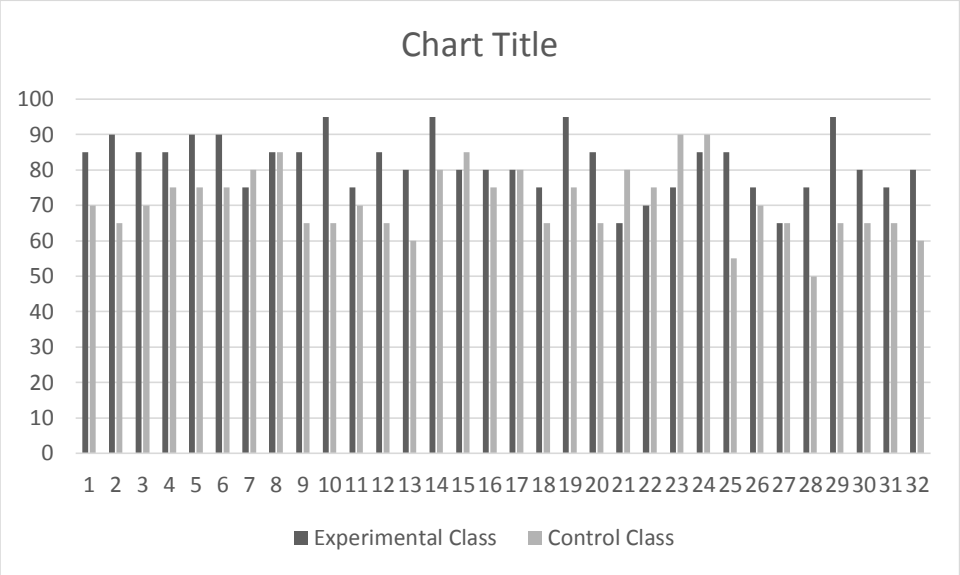
Y_1 = Y1-M_2 (Mean Y1)

X_1^2 = The squared value of X_1

Y_1^2 = The squared value of Y_1

In addition the researcher also provide the chart of calculation of score in experimental class and control class.

Graphic 4.3



Having known the data have normal distribution. The researcher used the data and put the data into T test, the T test calculation was soon in the following lines.

The Score of Distribution Frequency

1. Determine mean of variable X1 and X2

Variable X1 : $M_1 = \frac{\Sigma \times 1}{N_1}$ Variable

Y1 : $M_2 = \frac{\Sigma y1}{N_2}$

$M_1 = \frac{\Sigma 2620}{32}$ $M_2 = \frac{\Sigma 2275}{32}$

= 81,87 = 70,09

2. Determine t-test

$$t_0 = \frac{M_1 - M_2}{\sqrt{\left\{\frac{\sum X_1^2 + \sum y_1^2}{N_1 + N_2 - 2}\right\}\left\{\frac{N_1 + N_2}{N_1 . N_2}\right\}}}$$

$$t_0 = \frac{81.87 - 70.09}{\sqrt{\left\{\frac{2037.5 + 2772.29}{32 + 32 - 2}\right\}\left\{\frac{32 + 32}{32 . 32}\right\}}}$$

$$t_0 = \frac{11.78}{\sqrt{\left\{\frac{4809.79}{62}\right\}\left\{\frac{64}{1024}\right\}}}$$

$$t_0 = \frac{11.78}{\sqrt{\{77.57\}\{0.06\}}}$$

$$t_0 = \frac{11.78}{\sqrt{4,65}}$$

$$t_0 = \frac{11.78}{2,15}$$

$$t_0 = 5,47$$

Note:

M1 = The average score of experimental class (Mean X1)

M2 = The average score of control class (Mean Y1)

ΣX_1^2 = Sum of squared deviation score of experimental class

ΣY_1^2 = Sum of squared deviation score of control class

N_1 = The number of students of experimental class

N_2 = The number of students of control class

2 = Constant number

Having obtained the T score test, more over the writer has the degree of freedom by using following formula:

3. Degree of Freedom

df = N1+N2-2

= 32+32-2

= 62

From the data above, we can interpret there is no degree of freedom for 62, so the researcher uses the closer df from 62. In degree of significance 5% from 62 t_t = 1,66 and in degree of significance 1% from 62 t_t = 2,38

Based on the result statistic calculation, it is obtained that the score of t_o is = 5,47 > t_t = 1,66 in degree of significance 5%. The score of t_o = 5,47 > t_t = 2,38 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 $t_{observation} > t_{table}$: The alternative hypothesis is accepted. It means there is a significant effect of learning cell towards students' reading comprehension at the second grade of SMP Riyadul Mubtadiin Pandeglang.

If $t_{observation} < t_{table}$: The Null hypothesis is rejected. It means there is no significant effect of learning cell towards students' reading comprehension at the second grade of SMP Riyadul Mubtadiin 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 40 and highest in post-test score is 70. After the writer conducted treatment of Learning Cell in teaching reading comprehension on narrative text and also conducted post-test. The lowest score in pre-test is 65 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: $t_{observation} > t_{table}$ = it means there is a significant effect of Learning Cell in teaching reading comprehension on narrative text.

b. H_o: $t_{observation} < t_{table}$ = it means there is no significant effect of Learning Cell in teaching reading comprehension on narrative text.

According to the data, the value of $t_{observation}$ is bigger than t_{table}. $t_{observation} = 5,47 > t_{table} = 1,66$ (5%) or $t_{observation} = 5,47 > 2,38$ (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 Learning Cell in teaching reading comprehension on narrative text. It can be seen that student got better score by Learning Cell. This could

be seen after comparing the score of pre-test (before using Learning Cell) and post-test (after using Learning Cell).

Based on the data obtained from control and experiment class among the average scores. And *t* observation, the researcher summarizes that teaching narrative text through Learning Cell has significant effect towards students' reading comprehension because the purpose of this method Learning Cell 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 student who are thought using Learning Cell) has the mean value (81,87), meanwhile the control class (the students who are not taught using Learning Cell) has the mean value (70,09). 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 4.9

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

Class	The Average of Pre-Test	The Average Post-Test
Experimental	59,21	81,87
control	54,4	70,09

So, it can be concluded that Learning Cell 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 at the second grade of SMP Riyadul Mubtadiin Pandeglang.