CHAPTER IV

THE RESULT OF THE RESEARCH

A. Data Description

In this chapter, the researcher would show the result of the students test score. The researcher conducted experimental research. The writer takes 80 students at the second grade of SMPN 5 Kota Serang in academic year 2016/2017. The goal of the research is intended to find out the accurate data in accord with the research title. The sample of this study divided into two classes. They are 40 students from class VIII D as experiment class and 40 students from class VIII G as the control class.

For instrument, the researcher used test. There are pre-test and post-test for experimental class and control class. The researcher uses statistic calculation of "t" test in analyzing the data. "t" test is formula to know the different means of pre-test and post-test result and pre-test and post-test treatment.

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

Based on research conducted, the result of pre-test at experiment class got the score 1946. The average score of pre-test was 48, 65. The score of pre-test will be describes in the following table:

Table 1

The students' score of pre-test at the experiment class

No	Initial Name	Total Score
1.	AFM	50
2.	ANS	40
3.	ANR	45
4.	ARD	42
5.	AJZ	70
6.	FPR	40
7.	HTS	69
8.	HSI	38
9.	HPT	45
10.	INM	35
11.	IRS	40
12.	IRH	45

13.	LDY	69
14.	MFT	40
15.	MLN	45
16.	MRK	**77**
17.	MRY	50
18.	MRQ	65
19.	MHS	41
20.	MHM	50
21.	MRP	45
22.	MZK	**34**
23.	NIW	37
24.	RHM	**34**
25.	RJG	38
26.	RSD	35
27.	SPM	45
28.	SRF	75
29.	SND	35
30.	SRJ	35
31.	SFW	70

32.	SFR	41
33.	TGM	60
34.	UUF	**34**
35.	WSH	39
36.	WFH	40
37.	WPH	67
38.	WTJ	53
39.	YGA	65
40.	ZDA	68
Average		$\sum X$=1946

Mean of pre-test:

$$X = \sum X = \frac{1946}{N} = \frac{1946}{40} = 48, 65$$

The table 1 above showed the results of the students' pre-test score at the experimental class. The data showed the maximum score was 77 and the minimum score was 34. 1 student get maximum score and 3 students get minimum score. The average score of pre-test was 48, 65.

While the result of post-test at the experimental got better score it can be described as follow:

Table 2

The students' score of post-test at the experiment class

No.	Initial Name	Total Score
1.	AFM	65
2.	ANS	67
3.	ANR	53
4.	ARD	51
5.	AJZ	74
6.	FPR	70
7.	HTS	73
8.	HIS	60
9.	HPT	71
10.	INM	66
11.	IRS	65
12.	IRH	67
13.	LDY	71
14.	MFT	72

15.	MLN	74
16.	MRK	**90**
17.	MRY	65
18.	MRQ	70
19.	MHS	**50**
20.	MHM	70
21.	MRP	77
22.	MZK	51
23.	NIW	70
24.	RHM	55
25.	RJG	**50**
26.	RSD	73
27.	SPM	70
28.	SRF	80
29.	SND	**50**
30.	SRJ	64
31.	SFW	80
32.	SFR	72
33.	TGM	75

| 34.	UUF	60
35.	WSH	65
36.	WFH	65
37.	WPH	70
38.	WTJ	75
39.	YGA	72
40.	ZDA	75
Average		$\sum X=2693$

Mean of pre-test:

$$X = \sum X = \frac{2693}{N} = \frac{2693}{40} = 67, 32$$

The table 2 above showed the results of the students' post-test score at the experimental class. The data showed the maximum score was 90 and the minimum score was 50. 1 student get maximum score and 3 students get minimum score. The average score of post-test was 67, 32.

This is the comparison graphic of pre-test and post-test at the experimental class.

Graphic 1

The comparison of pre-test and post-test at the
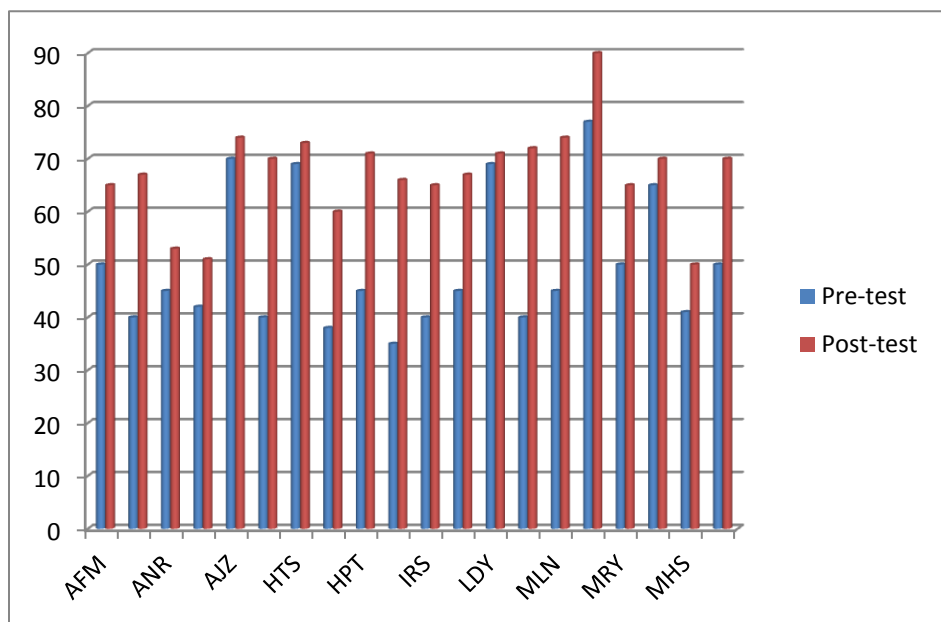
experimental

Based on the explanation above, it showed that the result of the experiment class got the significant improvement after giving treatment, it seen from the average score of post-test is better than the average score of the post-test, that is 67, 32 > 48, 65.

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

The students' score of control class obtained 46, 92 for mean of pre-test and 58, 47 for mean of post-test. The score of pre-test and post-test will be describes in the following table:

Table 3

The students' score of pre-test at the control class

No.	Initial Name	Total Score
1.	APN	38
2.	ANF	61
3.	AIS	60
4.	AIM	68
5.	ARA	35
6.	AMD	35
7.	DSF	57
8.	DNJ	**71**
9.	EMR	60
10.	EOP	**71**
11.	FRS	50
12.	HMY	50

13.	HFB	63
14.	HOA	35
15.	HSN	**34**
16.	KHR	38
17.	MRA	39
18.	MAK	40
19.	MUZ	36
20.	MHM	38
21.	MAU	39
22.	MNT	35
23.	NVT	58
24.	NRH	57
25.	NSF	58
26.	RHL	**34**
27.	RAM	**34**
28.	RYL	**34**
29.	RFD	37
30.	STF	52
31.	STS	40

|		
32.	SBB	40
33.	SVS	**34**
34.	SRY	44
35.	TSY	45
36.	VSC	40
37.	VDN	65
38.	WHL	**34**
39.	WSP	53
40.	ASR	65
Average		$\sum X=1877$

Mean of pre-test:

$$X = \sum X = \frac{1877}{N} = \frac{1877}{40} = 46,92$$

The table 3 above showed the results of the students' post-test score at the control class. The data showed the maximum score was 71 and the minimum score was 34. 3 students get the maximum score and 6 students get minimum score. The average score of pre-test was 46, 92. The average of post test was 58, 47.

Table 4

The students' score of post-test at the control class

No.	Initial Name	Total Score
1.	APN	46
2.	ANF	64
3.	AIS	72
4.	AIM	72
5.	ARA	45
6.	AMD	48
7.	DSF	70
8.	DNJ	**73**
9.	EMR	63
10.	EOP	72
11.	FRS	64
12.	HMY	67
13.	HFB	65
14.	HOA	47
15.	HSN	50
16.	KHR	68

17.	MRA	46
18.	MAK	44
19.	MUZ	**40**
20.	MHM	42
21.	MAU	45
22.	MNT	48
23.	NVT	63
24.	NRH	67
25.	NSF	69
26.	RHL	60
27.	RAM	62
28.	RYL	50
29.	RFD	58
30.	STF	70
31.	STS	63
32.	SBB	51
33.	SVS	65
34.	SRY	68
35.	TSY	50

36.	VSC	65
37.	VDN	67
38.	WHL	43
39.	WSP	48
40.	ASR	69
Average		$\sum X$=2339

Mean of pre-test:

$$X = \sum X = \frac{2339}{N} = \frac{2339}{40} = 58, 47$$

The table 4 above showed the results of the students' post-test score at the control class. The data showed the maximum score was 73 and the minimum score was 40. 1 student get maximum score and 1 student get minimum score. The average score of pre-test was 46, 92. The average of post test was 58, 47.

This is comparison graphic of pre-test and post-test at control class:

Graphic 2

The comparison of pre-test and post-test at control class
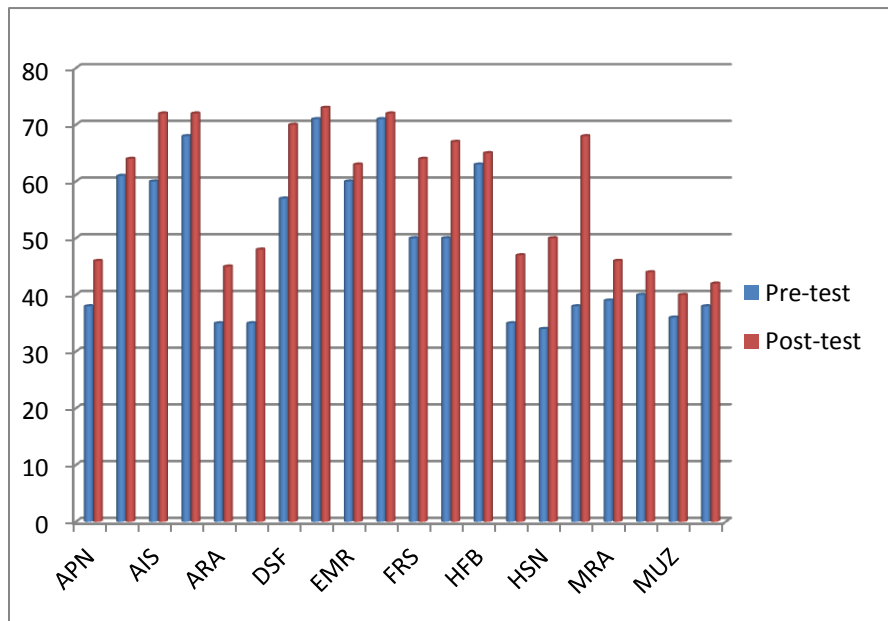
After getting the data, the writer analyzed it by using statistic calculation of test formula.

Table 5

The Comparison Score of X and Y (Experiment Class)

No	Initial Name	X	Y	D=(X-Y)	$D^2=(X-Y)^2$
1.	AFM	50	65	**-15**	**225**
2.	ANS	40	67	**-27**	**729**
3.	ANR	45	53	**-8**	**64**
4.	ARD	42	51	**-9**	**81**
5.	AJZ	70	74	**-4**	**16**
6.	FPR	40	70	**-30**	**900**
7.	HTS	69	73	**-4**	**16**
8.	HIS	38	60	**-22**	**484**
9.	HPT	45	71	**-26**	**676**
10.	INM	35	66	**-34**	**1156**
11.	IRS	40	65	**-25**	**625**
12.	IRH	45	67	**-22**	**484**
13.	LDY	69	71	**-2**	**4**
14.	MFT	40	72	**-32**	**1024**
15.	MLN	45	74	**-29**	**841**

16.	MRK	**77**	**90**	**-13**	**169**
17.	MRY	50	65	**-15**	**225**
18.	MRQ	65	70	**-5**	**25**
19.	MHS	41	**50**	**-5**	**25**
20.	MHM	50	70	**-20**	**40**
21.	MRP	45	77	**-32**	**1024**
22.	MZK	34	51	**-17**	**289**
23.	NIW	37	70	**-33**	**1089**
24.	RHM	34	55	**-21**	**441**
25.	RJG	38	50	**-12**	**144**
26.	RSD	35	73	**-38**	**1444**
27.	SPM	45	70	**-25**	**625**
28.	SRF	75	80	**-5**	**25**
29.	SND	35	50	**-15**	**225**
30.	SRJ	35	64	**-29**	**841**
31.	SFW	70	80	**-10**	**100**
32.	SFR	41	72	**-31**	**961**
33.	TGM	60	75	**-15**	**225**
34.	UUF	34	60	**-26**	**676**

35.	WSH	39	65	-26	676
36.	WFH	40	65	-25	625
37.	WPH	67	70	-3	9
38.	WTJ	53	75	-22	484
39.	YGA	65	72	-7	49
40.	ZDA	68	75	-7	49
	Sum	1946	2693	$\sum D= -746$	$\sum D^2=17810$
	Average	48, 65	67, 32	-18, 65	445, 25

Table 6

The Comparison Score of X and Y (Control Class)

No	Initial Name	X	Y	D=(X-Y)	$D^2=(X-Y)^2$
1.	APN	38	46	-8	64
2.	ANF	61	64	-3	9
3.	AIS	60	72	-12	144
4.	AIM	68	72	-4	8
5.	ARA	35	45	-10	100
6.	AMD	35	48	-13	169
7.	DSF	57	70	-13	169

8.	DNJ	**71**	**73**	**-2**	**4**
9.	EMR	60	63	**-3**	**6**
10.	EOP	**71**	72	**-1**	**1**
11.	FRS	50	64	**-14**	**196**
12.	HMY	50	67	**-17**	**289**
13.	HFB	63	65	**-2**	**4**
14.	HOA	35	47	**-12**	**144**
15.	HSN	34	50	**-16**	**256**
16.	KHR	38	68	**-30**	**900**
17.	MRA	39	46	**-7**	**49**
18.	MAK	40	44	**-4**	**16**
19.	MUZ	36	40	**-4**	**16**
20.	MHM	38	42	**-4**	**16**
21.	MAU	39	45	**-6**	**36**
22.	MNT	35	48	**-13**	**169**
23.	NVT	58	63	**-5**	**25**
24.	NRH	57	67	**-10**	**100**
25.	NSF	58	69	**-11**	**121**
26.	RHL	34	60	**-26**	**676**

27.	RAM	34	62	**-28**	**784**
28.	RYL	34	50	**-16**	**256**
29.	RFD	37	58	**-21**	**441**
30.	STF	52	70	**-18**	**324**
31.	STS	40	63	**-23**	**23**
32.	SBB	40	51	**-11**	**11**
33.	SVS	34	65	**-31**	**961**
34.	SRY	44	68	**-24**	**576**
35.	TSY	45	50	**-5**	**25**
36.	VSC	40	65	**-25**	**625**
37.	VDN	65	67	**-2**	**4**
38.	WHL	34	43	**-9**	**81**
39.	WSP	53	48	**5**	**25**
40.	ASR	65	69	**-4**	**16**
	Sum	1877	2339	**$\sum D$= -462**	**$\sum D^2$=7879**
	Average	46, 92	58, 47	**-11, 55**	**196, 975**

B. Data Analysis

To find out the result of test (pre-test and post-test) experiment class the researcher makes the table of the students' score, the researcher mention of respond's number and their result as follow:

The researcher calculated the results of $\sum D = -746$, $\sum D^2 = 17810$, then the researcher:

$$SD_D = \sqrt{\frac{\sum D^2}{N} - \left(\frac{\sum D}{N}\right)^2}$$

Note:

N = amount of students given the test

X = the result of pre-test

Y = the result of post-test

D = difference between score of variable X and score of variable Y

D^2 = difference between score of variable X and score of variable Y that have quad rated

$\sum D$ = amount difference (D) between score variable X and Y

$\sum D^2$ = amount difference (*D*) between score variable X and Y that have quad rated

$$SD_D = \sqrt{\dfrac{\sum D^2}{N} - \left(\dfrac{\sum D}{N}\right)^2}$$

$$= \sqrt{\dfrac{17810}{40} - \left(\dfrac{-746}{40}\right)^2}$$

$$= \sqrt{445,25 - 347,82}$$

$$= \sqrt{97,43}$$

$$= 9,87$$

After finding the result of SD_D we can seek SE_{MD} (standard error of the mean of different) using formula:

$$SE_{MD} = \dfrac{SD_D}{\sqrt{N-1}}$$

$$= \dfrac{9,87}{\sqrt{40-1}}$$

$$= \dfrac{9,87}{\sqrt{39}}$$

$$= \dfrac{9,87}{6,24}$$

$$= 1,58$$

To find out the mean of different (*MD*) between variable X and Y the researcher tried formula:

$$M_D = \frac{\sum D}{N}$$

$$= \frac{-746}{40}$$

$$= -18, 65$$

The last calculation is determining the result of t_o (t observation) of the test with formula:

$t_o = \dfrac{M_D}{SE_{MD}}$

$= \dfrac{-18, 65}{1, 58}$

$= -11, 80$

The result (-11, 80) indicates that there is a difference of degree as much as 11, 80 regradless the minus, but it does not indicate negative score. Then in order to complete the result of the researcher tried to find out the degree of freedom (*Df*) with the formula:

$$Df = (N_1 + N_2) - 2$$

$$= (40 + 40) - 2$$

$$= 78$$

There is no degree of freedom for 78, so the writer uses the close *Df* from 80. D*f* 78 (see the table of "t" values degree of significant of 5% and 1%) are t table of significant level 5% is 1, 99 and 1% is 2, 64. So, the result is 1, 99 < 11, 80. It means that t_o (t observation) is higher than t_t (t table).

C. Data Interpretation

The researcher followed some assumption as the statistic hypothesis states: if the result of calculation t_o (t observation) is higher than t_t (t table), $t_o > t_t$, the zero hypothesis (H_o) is accepted, it means that the technique is rejected.

Based on the result of the calculation, the researcher obtained the value of t_o 11, 80 and the degree freedom (*Df*) = 78.

To know whether it is significant or not, we have to take at the table in appendices, the result of t_t on significant 5% is 1, 99 and 1% is 2, 64. So, the zero hypothesis (Ho) is rejected and the alternative hypothesis (H_a) is accepted. It means that there is a

significant influence of using DWA as a strategy in learning writing recount text.

D. Discussion

Based on improvement of the students' writing by using Directed Writing Activity (DWA), the writer assumes that using DWA is significant in teaching writing, to test hypothesis. The data obtained from pre-test and post-test and analyzed by using t-test formula.

From the explanation about the analysis of the result on the tables, we can see that there is significant influence of using Directed Writing Activity (DWA) as strategy in learning writing recount text is better than teaching of writing without using DWA strategy. So, the researcher can conclude that using DWA is a good strategy in teaching writing recount text at second grade of SMPN 5 Kota Serang.