CHAPTER IV

RESULT AND DISCUSSION

A. Data Description

To describe the effectiveness of using peer feedback in teaching students descriptive writing, the writer gave the pre-test before teaching, as post-test that would be used as data in the final research.

The writer takes 60 students as a subject this research. It is divided into two classes. There are 30 students from VII E as the experimental class and 30 students from VII F as the control class. The writer got the data used test as instrument, the first is result of pre-test and the second is result of post-test.

The result of pre-test in experiment class is named variable (X_1), the result of post-test in experimental class is named variable(X_2), the result of pre-test in control class is named variable (Y_1) and the result of post-test in control class is named variable(Y_2).

B. The Processing of Experimental Score

Score of pre-test and post-test of experiment class. The score in this test would be describing in table

Table 4.1
The Result of Experiment Class

No	Student's Name	Pre-Test	Post-Test
1	AHD	23	45
2	ABH	38	55
3	ABI	38	50
4	ALI	29	50
5	ARY	45	50
6	DTY	32	55
7	ECY	39	57
8	HRA	60	70
9	IRA	32	60
10	JFI	55	73
11	KLH	60	82
12	LNH	25	93
13	LFH	27	82
14	MIG	30	77
15	MRI	35	80
16	MRF	45	67
17	MAL	60	67
18	MMI	65	67
19	MYA	70	80
20	RMY	45	83
21	RSP	60	81
22	SPN	61	67
23	SIH	55	78
24	SNF	60	75
25	SNH	71	74
26	SUH	37	93
27	SLA	65	87
28	THI	60	82
29	YSI	65	87
30	YLA	82	89
TOTAL		1469	2156

According to table of experiment class, it can be seen the highest score of pre-test is 82 and the lowest score is 23, the total score of pre-test is 1469. The highest score of post-test is 93 and the lowest is 45. The total scores 2156. So, from the data there is the increasing from pre-test to post-test.

1. **The result of Pre-test of Experimental Class**

Based on the table above the writer will arrange the scores from the lowest to the highest

23	25	27	29	30	32	32	35	37
38	38	39	45	45	45	55	55	60
60	60	60	60	60	61	65	65	65
70	71	82						

1. Finding out range with formula:

R= H – L + 1

= 82 – 23 + 1

= 60

2. Looking for the class interval (k), with formula:

$\frac{R}{i}$= $\frac{60}{i}$ = it is had better getting result between 10 – 20

So, it got i=6 because $\frac{60}{6}$ = 10 (between 10 - 20).

i=10 (be completed)

3. Making distribution frequency table

Table 4.2
The Distribution Frequency of Pre-test Experimental Class

Interval	**F**	**X**	x'	**f.** x'	**f.**x'^2
23 – 28	3	25.5	+4	12	48
29 – 34	4	31.5	+3	12	36
35 – 40	5	37.5	+2	10	20
41 – 46	3	43.5	+1	3	3
47 – 52	0	(49.5)M’	0	0	0
53 – 58	2	55.5	-1	-2	2
59 – 64	7	61.5	-2	-14	28
65 – 70	4	67.5	-3	-12	36
71 – 76	1	73.5	-4	-4	16
77 – 82	1	79.5	-5	-5	25
	30=N			x' **f.** x' **= 0**	x' **f.**x'^2 **= 214**

4. Determining Mean Score of Mx^1

$$\text{M}x_1 = M' + \text{i}\left(\frac{\sum fx'}{N}\right)$$

$$= 49.5 + 6\left(\frac{0}{30}\right)$$

$$= 49.5 + 0$$

$$= 49.5$$

5. Determining Deviation Standard

$$SDx_1 = i\sqrt{\frac{\Sigma f.x'^2}{N} - \left(\frac{\Sigma f.x'}{N}\right)^2}$$

$$= 6\sqrt{\frac{214}{30} - \left(\frac{0}{30}\right)^2}$$

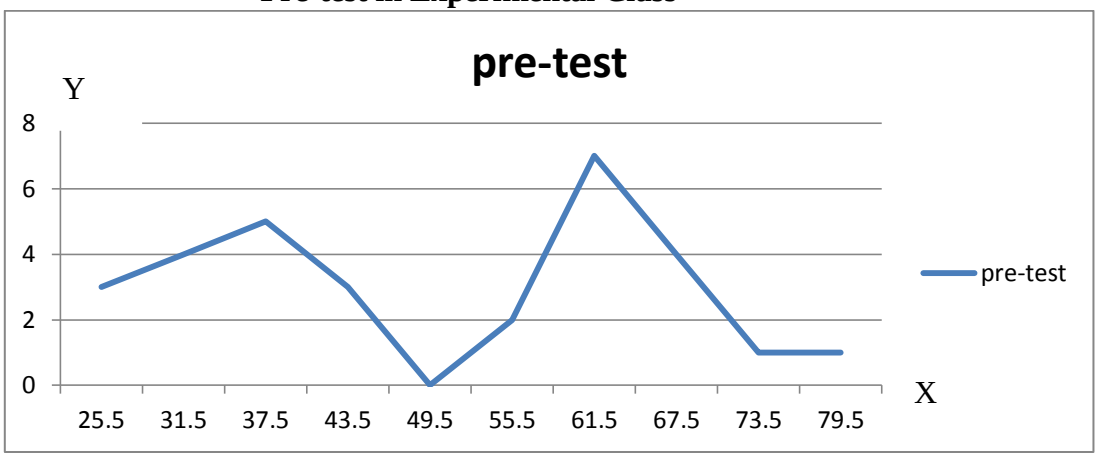
$$= 6\sqrt{7.13 - 0} = 6\sqrt{7.13} = 6 \text{ x } 2.67 = 16.02$$

6. Determining Error Standard

$$SEx^1 = \frac{SDx^1}{\sqrt{N-1}} = \frac{16.02}{\sqrt{30-1}} = \frac{16.02}{5.38} = 2.97$$

7. Making Polygon Graph

Graphic 4.1
Pre-test in Experimental Class



2. The Result of Post-test of Experimental Class

Based on the table above the writer will arrange the scores from the lowest to the highest score as follow:

45 50 50 50 55 55 57 60 67

67 67 67 70 73 74 75 77 78

80 80 81 82 82 82 83 87 87

90 93 93

1. Finding out range with formula:

R= H – L + 1

= 93 – 45 + 1

= 49

Interval	**F**	**X**	x'	**f.** x'	**f.**x'^2
45-48	1	46.5	+6	6	36
49-52	3	50.5	+5	15	75
53-56	2	54.5	+4	8	32
57-60	2	58.5	+3	6	18
61-64	0	62.5	+2	0	0
65-68	4	66.5	+1	4	4
69-72	1	(70.5)M’	0	0	0
73-76	3	74.5	-1	-3	3
77-80	4	78.5	-2	-8	16
81-84	5	82.5	-3	-15	45

85-88	2	86.5	-4	-8	32
89-92	1	90.5	-5	-5	25
93-96	2	94.5	-6	-12	72
	30=N			x' **f.** x' **= -12**	x' **f.**x'^2 **= 358**

2. Looking for the class interval (k), with formula:

$\frac{R}{i} = \frac{49}{i}$ = it is had better getting result between 10 – 20

So, it got i=4 because $\frac{49}{4}$= 12.25 (between 10 – 20).

i=13 (be completed)

3. Making distribution frequency table

Table 4.3
The Distribution Frequency of Post-test Experimental Class

4. Determining Mean Score of Mx^1

$$Mx_2 = M' + i\left(\frac{\sum fx'}{N}\right)$$

$$= 70.5 + 4\left(\frac{-12}{30}\right)$$

$$= 70.5 - 1.6$$

$$= 68.9$$

5. Determining Deviation Standard

$$SDx_2 = i\sqrt{\frac{\Sigma \mathbf{f}.x'^2}{N} - \left(\frac{\Sigma \mathbf{f}.\mathbf{x}'}{N}\right)^2}$$

$$= 4\sqrt{\frac{358}{30} - \left(\frac{-12}{30}\right)^2}$$

$$= \sqrt{12.83 - 0.16} = 4\sqrt{12.67}$$

$$= 4 \text{ x } 3.55$$

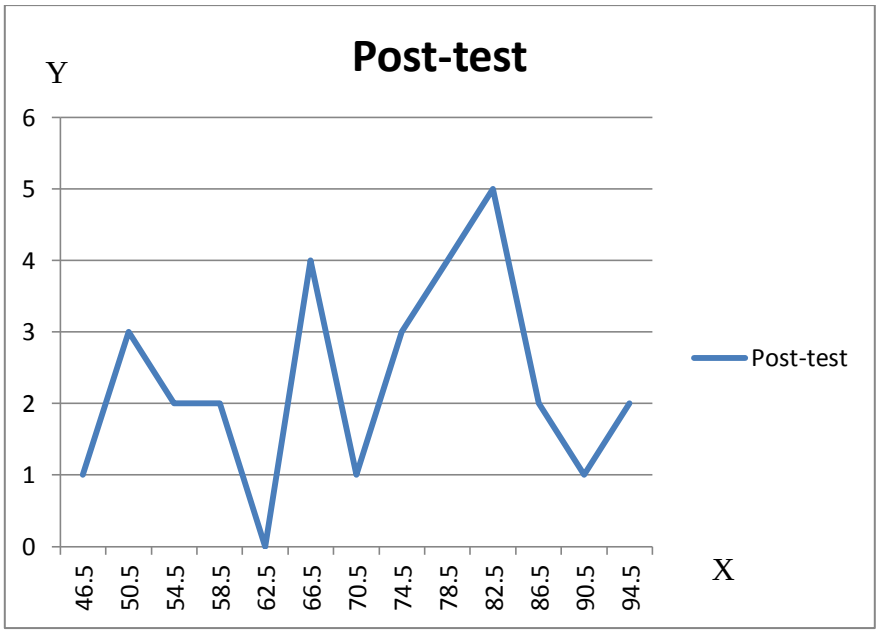
$$= 14.2$$

6. Determining Error Standard

$$\text{SE}x^2 = \frac{SDx^1}{\sqrt{N-1}} = \frac{14.2}{\sqrt{30-1}} = \frac{14.2}{5.38} = 2.63$$

1. Making Polygon Graph

Graphic 4.2
Post-test in Experimental Class



C. The Processing of Control Class Score

Score of pre-test and post-test of control class. The score in this test would be describing in table

Table 4.4
The Result of Control Class

No	Student's Name	Pre-Test	Post-Test
1	AIU	25	67
2	AHF	47	43
3	ASW	25	40
4	AJR	27	39
5	ALI	34	75
6	ANS	40	76
7	ANA	25	31
8	CYP	25	30
9	DWI	32	43
10	EWI	70	75
11	FRD	28	31
12	IHL	29	37
13	JSK	35	74
14	KMI	31	33
15	LAM	25	71
16	MRN	65	71
17	MFS	25	38
18	MNH	25	35
19	NMS	50	69
20	NFA	45	36
21	NRH	30	30
22	NAI	41	35
23	RHM	44	34
24	RHN	46	71
25	SLA	31	32
26	SSS	73	57

27	SYP	71	43
28	SYT	39	30
29	WMF	26	86
30	ZMN	25	36
TOTAL		1134	1468

Based on the table of control class it can be shown the highest score of pre-test is 73 and the lowest score is 25, the total score of pre-test is 1134. The highest score of post-test is 86 and the lowest is 30. The total scores 1468. So, from the data there is the increasing from pre-test to post-test.

1. The Result of Pre –test of Control Class

Based on the table above the writer will arrange the scores from the lowest to the highest

25 25 25 25 25 25 25 25 26

27 28 29 30 31 31 32 34 35

39 40 41 44 45 46 47 50 65

70 71 73

1. Finding out range with formula:

R= H – L + 1

= 73 – 25 + 1

= 49

2. Looking for the class interval (k), with formula:

   $\frac{R}{i} = \frac{49}{i}$ = it is had better getting result between 10 – 20

   So, it got i=4 because $\frac{49}{4}$= 12.25 (Between 10 – 20).

   i=13 (be completed)

2. Making distribution frequency table

Table 4.5
The Distribution Frequency of Pre-test Control Class

Interval	**F**	**X**	x'	**f.** x'	**f.**x'^2
25-28	11	26.5	+6	66	396
29-32	5	30.5	+5	25	125
33-36	2	34.5	+4	8	32
37-40	2	38.5	+3	6	18
41-44	2	42.5	+2	4	8
45-48	3	46.5	+1	3	3
49-52	1	(50.5)M’	0	0	0
53-56	0	54.5	-1	0	0
57-60	0	58.5	-2	0	0
61-64	0	62.5	-3	0	0
65-68	1	66.5	-4	-4	16

69-72	2	70.5	-5	-10	50
73-76	1	74.5	-6	-6	36
	30=N			x' **f.** x' **=92**	x' **f.**x'^2 **= 684**

4. Determining Mean Score of Mx^1

$$My_1 = M' + i\left(\frac{\sum fx'}{N}\right)$$

$$= 50.5 + 4\left(\frac{92}{30}\right)$$

$$= 50.5 + 12.26$$

$$= 62.76$$

5. Determining Deviation Standard

$$SDy_1 = i\sqrt{\frac{\Sigma \mathbf{f}.x'^2}{N} - \left(\frac{\Sigma \mathbf{f}.\mathbf{x'}}{N}\right)^2}$$

$$= 4\sqrt{\frac{684}{30} - \left(\frac{92}{30}\right)^2}$$

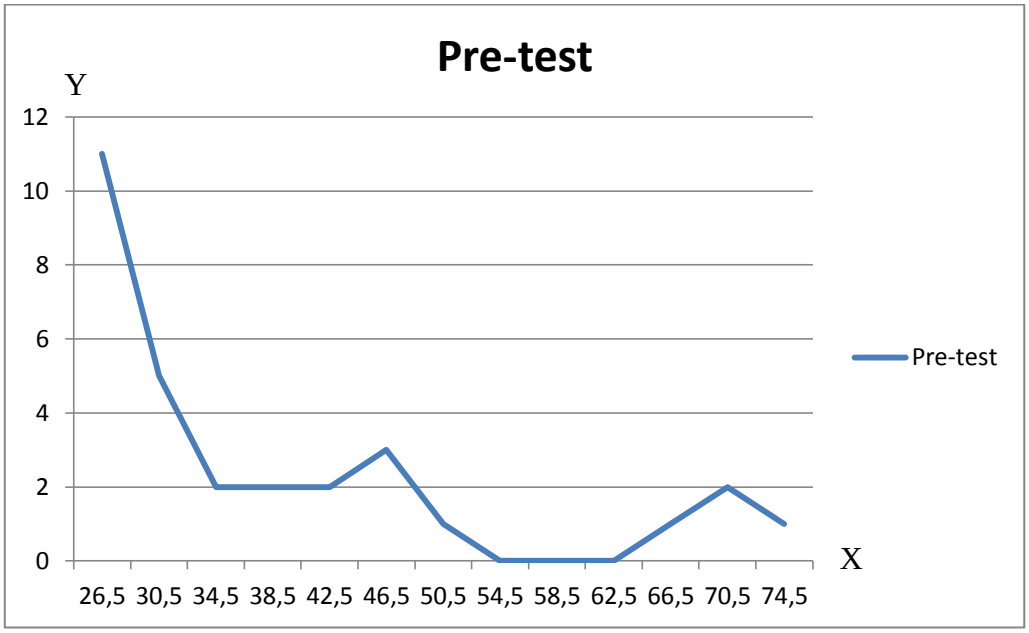
$$= 4\sqrt{22.8 - 9.36} = 4\sqrt{13.44} = 4 \text{ x } 3.66 = 14.64$$

6. Determining Error Standard

$$SEy^1 = \frac{SDx^1}{\sqrt{N-1}} = \frac{14.64}{\sqrt{30-1}} = \frac{14.64}{5.38} = 2.72$$

7. Making Polygon Graph

Graphic 4.3
Pre-test in Control Class



3. The Result of Post-test of Control Class

Based on the table above the writer will arrange the scores from the lowest to the highest score as follow:

30	30	30	30	31	31	34	34	35
35	36	36	36	40	43	43	43	50
55	57	61	65	67	71	71	71	74
75	75	86						

1. Finding out range with formula:

R= H – L + 1

= 86 – 30 + 1

= 57

2. Looking for the class interval (k), with formula:

$\frac{R}{i}$= $\frac{57}{i}$ = it is had better getting result between 10 – 20

So, it got i=5 because $\frac{57}{5}$= 11.4 (between 10 – 20).

i=12 (be completed)

3. Making distribution frequency table

Table 4.6
The Distribution Frequency of Post-test Control Class

Interval	**F**	**X**	x'	**f.** x'	**f.**x'^2
30-34	8	32	+5	40	200
35-39	7	37	+4	28	112
40-44	4	42	+3	12	36
45-49	0	47	+2	0	0
50-54	0	52	+1	0	0
55-59	1	(57)M’	0	0	0
60-64	0	62	-1	0	0

65-69	2	67	-2	-4	8
70-74	4	72	-3	-12	36
75-79	3	77	-4	-12	48
80-84	0	82	-5	0	0
85-89	1	87	-6	-6	36
	30=N			x' **f.** x' **=46**	x' **f.x'^2 = 476**

4. Determining Mean Score of Mx^1

$$My_2 = M' + i\left(\frac{\sum fx'}{N}\right)$$

$$= 57 + 5\left(\frac{46}{30}\right)$$

$$= 57 + 7.66$$

$$= 64.66$$

5. Determining Deviation Standard

$$SDy_2 = i\sqrt{\frac{\Sigma f.x'^2}{N} - \left(\frac{\Sigma f.x'}{N}\right)^2}$$

$$= 5\sqrt{\frac{476}{30} - \left(\frac{46}{30}\right)^2}$$

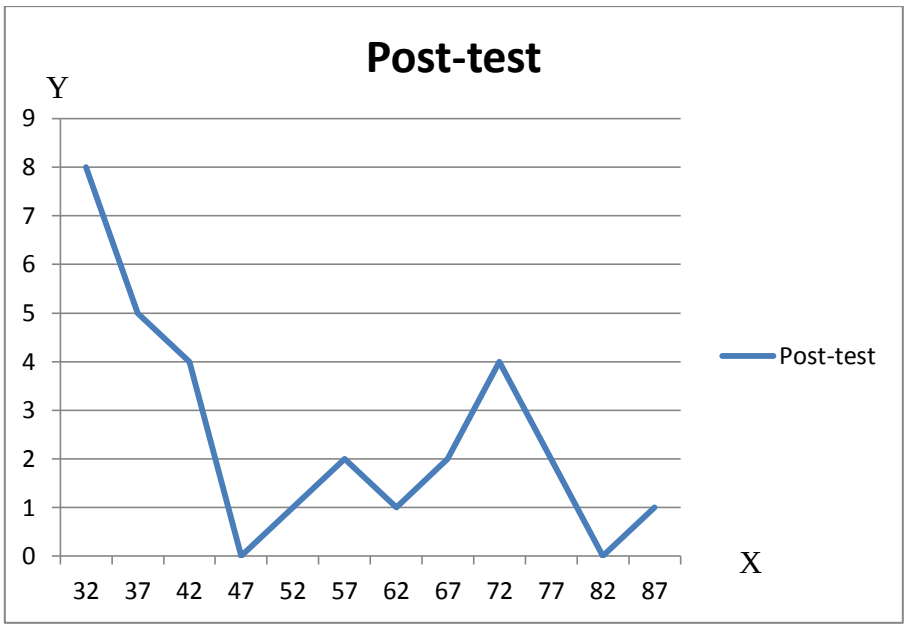
$$=5\ \sqrt{14.86 - 2.38} = 5\ \sqrt{13.52} = 5 \text{ x } 3.67 = 18.35$$

6. Determine Error Standard

$$SEy^2 = \frac{SDx^1}{\sqrt{N-1}} = \frac{18.35}{\sqrt{30-1}} = \frac{18.35}{5.38} = 3.41$$

7. Making Polygon Graph

Graphic 4.4
Post-test in Control Class



D. The Comparison Score of Post-test in Experimental and Control Class

The comparison score of post-test of experiment and control class. The score in this test would be describing in table

Table 4.7
Comparison Scores of Post-test in Experimental and Control Class

No	Post-test of Experimental class	Post-test of Control Class
1	45	67
2	55	43
3	50	40
4	50	39
5	50	75
6	55	76
7	57	31
8	70	30
9	60	43
10	73	75
11	82	31
12	93	37
13	82	74
14	77	33
15	80	71
16	67	71
17	67	38
18	67	35
19	80	69
20	83	36
21	81	30
22	67	35
23	78	34
24	75	71
25	74	32
26	93	57
27	87	43

28	82	30
29	87	86
30	89	36

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

1. Determining average from experimental class

MX = $M x_2$ – $M x_1$

= 68.9 – 49.5

= 19.4

2. Determining average from control class

MY = $M y_2$ – $M y_1$

= 64.66 – 62.76

= 1.9

3. Determining difference off error standard from X and Y

SEmx – SEmy = $\sqrt{SE x_2 + SE y_2}$

= $\sqrt{2.63 + 3.41}$

= $\sqrt{6.04}$ = 2.45

4. Determining t_o (t observation)

t_o = $\frac{MX - MY}{SEmx - SEmy}$

= $\frac{19.4 - 1.9}{2.45}$

$$= \frac{17.5}{2.45} = 7.14$$

5. Determining T-table with significance 5% and 1%

Df = N1 + N2 - 2

= 30 + 30 – 2

= 58 (consult to "t" table score)

Based on "t" table that there is 58. With df as number 58 is got "t" table as follow:

- At significance level 5% : t_t = 1.67
- At significance level 1% : t_t = 2.39

6. The writer compared t_o to t_t that if $t_o > t_t$; H_a is accepted and H_o is rejected. if $t_o < t_t$, it means that H_o is accepted and H_a is rejected.

$t_o : t_t$ → 7.14 >1.67 in degree of significance 5%

$t_o : t_t$ → 7.14 >2.39 in degree of significance 1%

E. Hypothesis Testing

Because "t_o" that the writer got from the calculation is higher than t table both at significance level 5% and 1%, so the hypothesis alternative (H_a) is accepted and (H_o) is rejected .

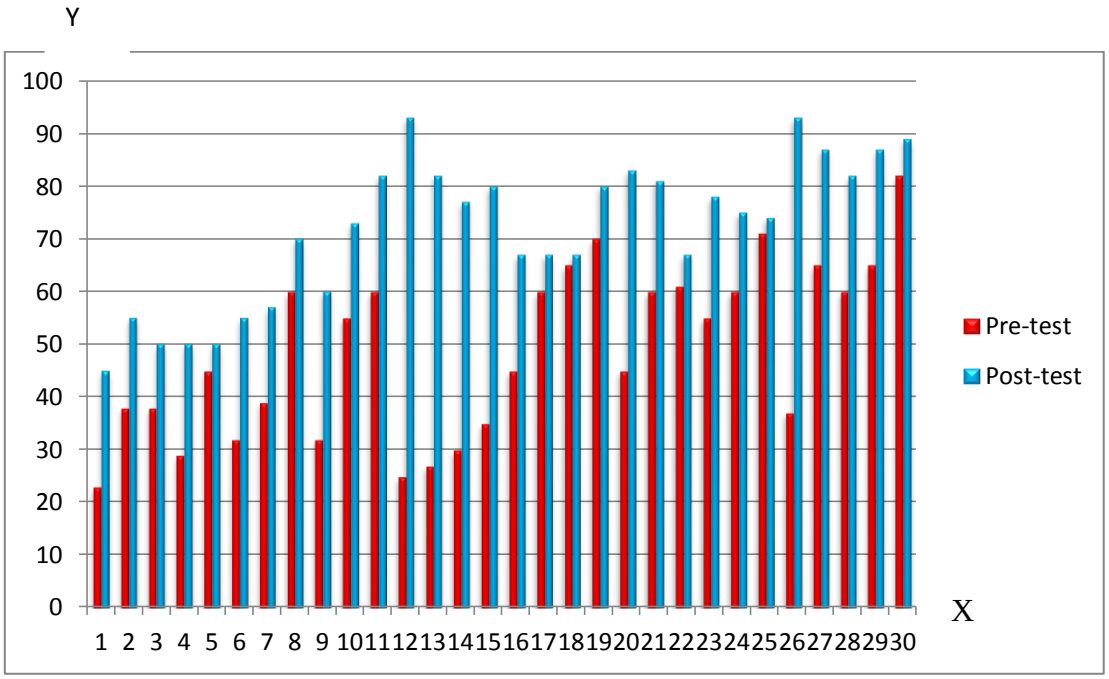
To prove the hypothesis, the data obtained from experiment and control class was calculated by using t-test formula with assumption as follow:

If $t_o > t_t$: the alternative hypothesis is accepted. It means there is improvement in students' writing descriptive text using peer feedback.

If $t_o < t_t$: The alternative hypothesis is rejected. It means there is no improvement in students' writing descriptive text using peer feedback.

F. Progress of Students' Achievement

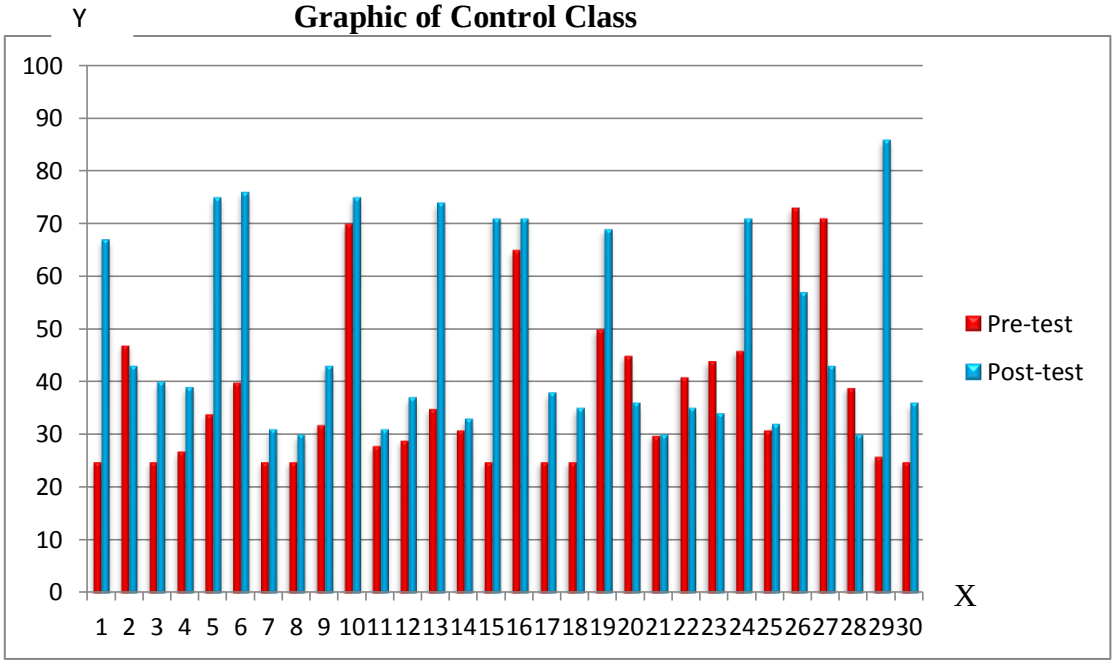
Graphic 4.5
Graphic of Experimental Class



It can be shown from the chart above. From 30 students in the experimental class, the highest score in pre-test is 82 and the highest

score in post-test is 93. Whereas, the lowest score in pre-test is 23 and the lowest score in post-test is 45. From graphic above, it shows that in experimental class, the students' score got increasing from pre-test to post test scores. Post-test scores are higher than pre-test, because treatment was applied in this group. So, peer feedback is effective to improve students writing descriptive text. Students have more confidence to express and write their ideas by comments and correction from their peers.

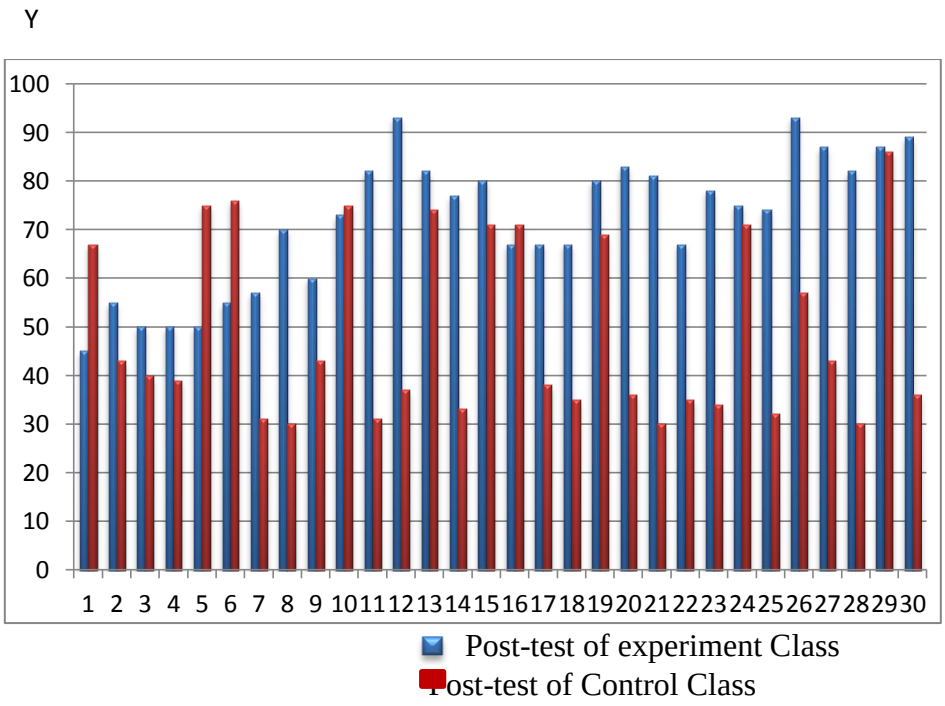
Graphic 4.6
Graphic of Control Class



It can be shown the score from the chart above. From 30 students in the control class, the highest score in pre-test is 73 and the highest score in post-test is 86. Whereas, the lowest score in pre-test is

25 and the lowest score in post-test is 30. From graphic above, it shows that in control class got increasing from pre-test to post-test but treatment was not applied in this group, only using direct instruction method in writing descriptive text.

Graphic 4.7
Comparisons' score of Experimental Class and Control Class



The graphic above describes the comparison between post-test in experimental class and post-test in control class. The highest score in experimental class is 93, while the highest score in control class is 86, the lowest score in experimental class is 45 and the lowest score in control class is 30

G. Interpretation Data

After got the data, the writer compared it with tt both in degree of significance 5% and 1%; therefore based on "t" table that there is 58. With df as number 58 is got "t" table as follow: At significance level 5%: t_t = 1.67 and at significance level 1%: t_t = 2.39. The writer compared t_o to t_t that if $t_o > t_t$; H_a is accepted and H_o is rejected. If $t_o < t_t$, it means that H_o is accepted and H_a is rejected.

Based on the data, the value of t_o (t observation) is higher than t_t (t tabel) from significance 5% t observation= 7.14 t table= 1.67 or t observation 7.14 >1.67 and significance 1% t observation=7.14 t table= 2.39 or t observation 7.14 >2.39, because "t_o" that the writer got from the calculation is higher than t table both at significance level 5% and 1%, so the hypothesis alternative (H_a) is accepted and (H_o) is rejected.

From the interpretation above, the writer said the use of peer feedback in teaching writing descriptive text could be better and more effective to make easy for students writing descriptive text rather than direct instruction or traditional method. This could be seen after comparing the score of pre-test (before using peer feedback) and post-test (after using peer feedback).

Based on the data obtained from experiment and control class among the average scores, and t observation, the writer summarizes that teaching writing using peer feedback has significant influence toward students' descriptive text.

By using peer feedback students feel more confident to express their ideas, not only the writers who have good understanding the text and it generic structure but also the students who provide respond, comment, and feedback really understand it.

Every students will be a writer and also commentator to provide a feedback. Therefore, everyone will feel comfort on the subject in the learning process.