CHAPTER IV

THE FINDING OF THE RESEARCH

A. Description of Data

In this chapter the writer would like to present the description of data. The sample of the research taken the studens of the second grade in SMP Daar El-ishlah Malinping, in this chapter, the writer divided them in two groups. The first experimental class that consist 40 students from class IIV^{A} and the second is control class that consist 39 students from class IIV^{B}.

The goal of the research is to know the effectivness using small group discussion in reading analytical exposition text and to give the report of data description and to analyze the score pre-test and post-test of the experiment and control class.The writer did an analyze of quantitative data. The data is obtained by giving test to the experiment and control class after giving a different both classes.

The students have poor ability in some test before using small group discussion method. The student have the difficuties to understand analytical exposition text but after used small group discussion the students more easier to understand analytical exposition text. It can be seen from the result of the pre-test and post test. In learning process of reading analytical exposition text by using small group discussion, the students understood one by one step by step how to understand meaning in the text.

To know the effectivness using small group discussion in reading analytical exposition text, the writer gave the test to students as sample both at the experimental class and control class. The test used in this research divided in two types, they are pre-test and post-test. The pre-test is given before treatment and post-test is given after treatment.Pre-test and post-test which the writer gave to students were question those are 10 (ten) multiple choice for pre-test and 10 (teen) essay for post-test,the correct answer is given score 2(two) and incorrect answer is given score 0 (zero)

The writer describes the students result of pre-test and post-test in experimental class and control class by the table blow:

Table 4.1

Data From Pre-Test and Post-Test of Experimental Class

No	Name of students	Pre-test (X1)	Post-test (X2)	Gained
1	A	50	72	22
2	ARH	40	48	8
3	AA	60	56	-4

4	**CMP**	**70**	**76**	**6**
5	**DAP**	**40**	**64**	**24**
6	**DI**	**60**	**80**	**20**
7	**DAS**	**50**	**68**	**18**
8	**FPA**	**60**	**60**	**0**
9	**ID**	**50**	**60**	**10**
10	**MA**	**50**	**52**	**2**
11	**MC**	**60**	**72**	**12**
12	**MM**	**60**	**72**	**12**
13	**MT**	**60**	**64**	**4**
14	**MPS**	**50**	**64**	**14**
15	**MRA**	**60**	**64**	**4**
16	**MR**	**60**	**68**	**8**
17	**MA**	**60**	**64**	**4**
18	**MI**	**70**	**60**	**-10**
19	**MT**	**60**	**64**	**4**
20	**MZ**	**50**	**60**	**10**
21	**M**	**50**	**64**	**14**

22	**NA**	**60**	**68**	**8**
23	**NPR**	**70**	**70**	**0**
24	**NR**	**50**	**52**	**2**
25	**N**	**60**	**80**	**20**
26	**NPR**	**60**	**76**	**16**
27	**RZ**	**60**	**60**	**0**
28	**RR**	**40**	**56**	**16**
29	**RG**	**60**	**60**	**0**
30	**RM**	**50**	**64**	**14**
31	**RF**	**60**	**64**	**4**
32	**RS**	**60**	**64**	**4**
33	**SA**	**40**	**60**	**20**
34	**SAB**	**50**	**60**	**10**
35	**SR**	**60**	**48**	**-12**
36	**SZ**	**50**	**60**	**10**
37	**TMR**	**40**	**70**	**30**
38	**UK**	**60**	**70**	**10**
39	**VN**	**50**	**60**	**10**

40	**WY**	**50**	**76**	**26**
N = 40	**TOTAL SCORE**	**2200**	**2570**	**370**
	AVERAGE	**55**	**64.25**	

Determine mean score pre-test and post test of experimental class, the writer follow the formula:

$M_1 = \frac{\sum X1}{N1}$ $\qquad$ $M_2 = \frac{\sum X2}{N2}$

$= \frac{2200}{40}$ $\qquad$ $= \frac{2570}{40}$

$= 55$ $\qquad$ $= 64.25$

Determine mean with the formula

$M = M_2 - M_1$

$= 64.25 - 55$

$= 9.25$

Note: M = Mean

M_1 = Mean of pre-test

M_2 = Mean of post- test

X1 = Student score of pre-test

X2 = student score of post-test

N = number of students

The table above showed the students score of pre-test at the experimental class. The highest score of pre-test is 70, it gotten by three students and the lowest score is 40, it gotten by five students and the average of pre-test score was 55. Then, the highest score of post-test is 80, it gotten by two students and the lowest score post-test is 48, it gotten by two students and the average score of post-test is 64.25.The student result can show the post –test is high score after applied small group discussion method. From the calculation of determine mean of experimental class,the average between the pre-test and post-test increase amount 9.25

Table 4.2

Data from Pre-test and Post-test of Control Class

No	Name of students	pre-test (y1)	post-test (y2)	Gained
1	ARS	50	56	6
2	AA	40	44	4
3	AG	40	52	12
4	AK	40	48	8

5	AMH	40	68	18
6	AEA	50	40	-10
7	A	30	52	22
8	BSD	50	44	-6
9	DS	50	48	-2
10	DF	30	44	14
11	GRA	50	44	-6
12	IS	40	44	4
13	IA	40	52	12
14	ISH	40	52	12
15	I	60	60	0
16	KS	50	40	-10
17	KH	30	52	12
18	MF	40	44	4
19	MD	30	40	10
20	MFM	50	44	-6
21	MHA	40	52	12
22	MN	40	52	12
23	MRF	40	52	12
24	MN	50	44	-6
25	MA	40	56	16
26	MDF	30	48	12

27	**MD**	**40**	**54**	**14**
28	**MDF**	**50**	**68**	**18**
29	**M**	**50**	**44**	**-6**
30	**NS**	**50**	**64**	**14**
31	**NW**	**40**	**68**	**18**
32	**PW**	**50**	**48**	**-2**
33	**Q**	**40**	**44**	**4**
34	**RF**	**30**	**48**	**18**
35	**RA**	**50**	**68**	**18**
36	**SAN**	**50**	**56**	**6**
37	**SLI**	**40**	**48**	**8**
38	**S**	**40**	**48**	**8**
39	**YS**	**40**	**56**	**16**
N = 39	**TOTAL SCORE**	**1660**	**1986**	**290**
	AVERAGE	**42,56**	**50.92**	

Determine mean score of pre-test and post-test control class,the writer follows the formula:

$M_1 = \frac{\sum Y1}{N1}$ $M_2 = \frac{\sum Y2}{N2}$

$= \frac{1660}{39}$ $= \frac{1986}{39}$

$= 42.56$ $= 50.92$

Determine mean with the formula:

$M = M_{1} - M_2$

$= 50.92 – 42.56$

$= 8.36$

Note: M = Mean

M_1 = Mean of pre-test

M_2 = Mean of post-test

Y1 = Students score of pre-test

Y2 = Students score of post-test

N = Number of students

The table above showed, the lowest score of pre-test is 36, it gotten by eleven students and high score of pre-test is 60, it gotten by one students and the average score of pre-test is 42.76. Then,the high score of post-test is 68, it gotten by four students and the lowest score of post-test 40, it's gotten three students and average score of post-test was 50.92. The students score in control class is less, because in this class not use small group discussion after the calculation of data determine mean the control class, the average between the pre-test and post-test increase amount 8.36.

After compparison between the score of pre-test and post-test in experimental class and control class, the writer calculates deviation and squared deviation. The result of the calculation by using the formula t-test can be seen at the analysis of the data.

B. Analyzing the data

After the writer got the data from pre-test and post-test score from experimental and control class. The writer analyzed the data by t-test formula with the degree of significance 5% and the writer used steps formula.

Table 4.3

The Score of Distribution Frequency

No	X	Y	X	Y	X^2	Y^2
1	72	56	7.75	5.08	60.06	25.80
2	48	44	-16.25	-6.92	264.06	47.88
3	56	52	-8.25	1.08	68.06	1.16
4	76	48	11.75	-2.92	138.06-	8.52
5	64	68	-0.25	17.08	0.06	291.72
6	80	40	15.75	-10.92	248.06	119.24

7	**68**	**52**	**3.75**	**1.08**	**14.06**	**1.16**
8	**60**	**44**	**-4.25**	**-6.92**	**18.06**	**47.88**
9	**60**	**48**	**-4.25**	**-2.92**	**18.06**	**8.52**
10	**52**	**44**	**-12.25**	**-6.92**	**150.06**	**47.88**
11	**72**	**44**	**7.75**	**-6.92**	**60.06**	**47.88**
12	**72**	**44**	**7.75**	**-6.92**	**60.06**	**47.88**
13	**64**	**52**	**-0.25**	**1.08**	**0.06**	**1.16**
14	**64**	**52**	**-025**	**1.08**	**0.06**	**1.16**
15	**64**	**60**	**-0.25**	**9.08**	**0.06**	**82.44**
16	**68**	**40**	**3.75**	**-10.92**	**14.06**	**119.24**
17	**64**	**52**	**-0.25**	**1.08**	**0.06**	**1.16**
18	**60**	**44**	**-4.25**	**-6.92**	**18.06**	**47.88**
19	**64**	**40**	**-0.25**	**-10.92**	**0.06**	**119.24**
20	**60**	**44**	**-4.25**	**-6.92**	**18.06**	**47.88**
21	**64**	**52**	**-0.25**	**1.08**	**0.06**	**1.16**
22	**68**	**52**	**3.75**	**1.08**	**14.06**	**1.16**
23	**70**	**52**	**5.75**	**1.08**	**33.06**	**1.16**
24	**52**	**44**	**-12.25**	**-6.92**	**150.06**	**47.88**
25	**80**	**56**	**15.75**	**5.08**	**248.06**	**25.80**
26	**76**	**48**	**11.75**	**-2.92**	**138.06**	**8.52**
27	**60**	**54**	**-4.25**	**3.08**	**18.06**	**9.48**
28	**56**	**68**	**-8.25**	**17.08**	**68.06**	**291.72**
29	**60**	**44**	**-4.25**	**-6.92**	**18.06**	**47.88**
30	**64**	**64**	**-0.25**	**13.08**	**0.06**	**171.08**
31	**64**	**68**	**-0.25**	**17.08**	**0.06**	**291.72**

32	**64**	**48**	**-0.25**	**-2.92**	**0.06**	**8.52**
33	**60**	**44**	**-4.25**	**-6.92**	**18.06**	**47.88**
34	**60**	**48**	**-4.25**	**-2.92**	**18.06**	**8.52**
35	**48**	**68**	**-16.25**	**17.08**	**264.06**	**291.72**
36	**60**	**56**	**-4.25**	**5.08**	**18.06**	**25.80**
37	**70**	**48**	**5.75**	**-2.92**	**33.06**	**8.52**
38	**70**	**48**	**5.75**	**-2.92**	**33.06**	**8.52**
39	**60**	**56**	**-4.25**	**5.08**	**18.06**	**25.80**
40	**76**		**11.75**		**138.06**	
$\sum$	**2570**	**1986**	**20.08**	**0.12**	**2395.4**	**1912.08**

Note:

X2 :Score post-test of the experimental class

Y2 :Score post-test of the control class

X :Deviation of experimental class

Y :Deviation of control class

X^2 :The squared deviation of experimental class

Y^2 :The squared deviation of control class

a. Determining mean of variabel X(variabel 1) with formula:

$$M_1 = \frac{\sum x}{N1}$$

$$= \frac{2.570}{40}$$

$$= 64.25$$

The average 64.25 it gotten from post-test in experiment class.the score divided all the sum students

b. Determine mean of variable Y (variable II) with formula:

$$M_2 = \frac{\sum y}{N2}$$

$$= \frac{1.986}{39}$$

$$= 50.92$$

The average 50.92 it gotten from post-test in control class.the score from post.test in control class divided all the sum students

c. Determining deviation standar of variabel I with formula:

$$SD_X = \sqrt{\frac{\sum x2}{N1}}$$

$$= \sqrt{\frac{2395.5}{40}}$$

$$= \sqrt{59.88}$$

$= 7.73$

The value 7.73. It gotten from the score $\sum x^2$ divided all sum students, the total is 59.88. then the multiple 59.88 is 7.73

d. Determining deviation standar of variabel II with formula:

$$SD_y = \sqrt{\frac{\sum Y2}{N1}}$$

$$= \sqrt{\frac{1912.08}{39}}$$

$$= \sqrt{49,02}$$

$$= 7.00$$

The value 7.00 it gotten from the score $\sum y^2$ divided all sum students the total is 49.02 and the multiple 49.02 is 7.00

e. Determining standar error of mean variabel I with formula:

$$SE_{Mx} = \frac{SD1}{\sqrt{N1-1}}$$

$$= \frac{7.73}{\sqrt{40-1}}$$

$$= \frac{7.73}{\sqrt{39}}$$

$$= \frac{7.73}{6.24}$$

$$= 1.23$$

In determining standar error of mean variabel 1 is the score from 7.73 divided all sum students 40-1 so the total is $\frac{7.73}{\sqrt{39}}$. the step is took multiple from 39 = 6.24.so the total is $\frac{7.73}{6.24}$. = 1.23

f. Determining standar error of mean variabel II with formula

$$SE_{My} = \frac{SD2}{\sqrt{N2-1}}$$

$$= \frac{7.00}{\sqrt{39-1}}$$

$$= \frac{7.00}{\sqrt{38}}$$

$$= \frac{7.00}{6.16}$$

$$= 1.13$$

In determining standar error of mean variabel II is the score from 7.00 divided all sum students 39-1 so the total is $\frac{7.00}{\sqrt{38}}$. the step is took multiple from 38 = 6.16.so the total is $\frac{7.00}{6.16}$. = 1.13

g. Determining standar error of mean differentce variable I and variabel II with formula:

$$SE_{M1-M2} = \sqrt{SEm1^2 + SEm2^2}$$

$$= \sqrt{1.23^2 + 1.16^2}$$

$$= \sqrt{1.51 + 1.34}$$

$$= \sqrt{2.85}$$

$$= 1.7$$

In the determining standar error of mean difference variable I and variable II is ,the score from multiple and adding the total secore from both, so the total is 2.85 from multiple both. 1.7 it gotten from both the total score

h. Analyzing the result by using calculation of $t\text{-}_{test}$ as follow:

$$t_0 = \frac{M1 - M2}{SEm1 - m2}$$

$$= \frac{64.97 - 50.92}{1.7}$$

$$= \frac{14.05}{1.7}$$

$$= 8.26$$

i. Determining degrees of freedom (df) with formula:

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

$$= (40 - 39) -2$$

$$= 79 - 2$$

$$= 77$$

From the data ,the mean of pre-test score obtained by students of $VIII^A$ as experimental class is = 55 and the data from pre- test score in control class by students $VIII^B$ is = 42.56.The highest score pre-test in two classes is different, in class $VIII^A$ as experimental class got 70 and $VIII^B$ as control class got 60. And the lowest score of pre-test in both classes is 40 for experimental class and 30 for control class.

Then, the means of post-test at experimental score = 64.25 it greater than control class = 50.92. The highest score of post-test at experimental class got 80 and control class got 72.

And the lowest post-test score of experimental class is 48, and the lowest post-test score of control class is 40.

According to the statistical calculation above,the value of t_o is 8.26 and the degree of freedom is 77 with 5% degree of significan. Based on the significance,it can be seen on df = 77 in significance 5% the value of t_{table} 1.7 by comparing the result of t_{table} and t_o in the degree of significance 5% $t_o \geq t_{table}$ = 8.26≥1.7 from the result of statistical of calculation, it obtained the t-observation t_o is 26. Meanwhile,the t_{table} with df 77 in significance 5% than 1.7. It mean t-observation(t_o) is higher than t-table(t_{table}), so in null hypothesis (H_O) is rejected and alternative hypothesis (Ha) is accepted

C. Interpretation of Data

From the result of pre-test and post-test in experimental class,the writer can be concluded that from the lowest score in pre-test Is 40,it gotten by five students and the high score is70,it gotten by three students.After the writer conducted treatment of small group discussion in reading analytical exposition text and also conducted post-test is.The lowest score in post-test is 48.it gotten by two students and the high score from post-test is 80,it gotten by two students.

Before deciding the result hypothesis,the writer proposes interpretation toward with procedure as follow:

a. H_a:$t_{observation} > t_{table}$ = It mean there is a significant of using small group discussion in teaching reading analytical exposition text.

b. H_o: $t_{observation}$ $<t_{table}$ = It means there is no significant effectiveness of using small group discussion method in reading analytical exposition text

According to the data, the value of $t_{obsevation}$ is bigger than t_{table}

$T_{observation} = 8.26 > t_{table}$ 1.7 (5%)

(1%), so H_o is rejected and H_a is accepted

If $t_o > t_{table}$ the Null Hypothesis is rejected and alternative Hypothesis is accepted.It mean there is significant difference of the students taugh using small group method between the studends without using small group

The writer summarized that $t_o > t_{table}$ it means that the null hypothesis is rejected and the alternative hypothesis is accepted

Based on the data obtained from experimental class the writer can inffered that small group discussion method has significance effect on students reading analytical exposition text. It has found that the increasing of learning reading skill caused by using small group discussion method to solve the problem that has thought in the statement of problem. The writer uses small group discussion as a method to improving students in reading skill . As the writer state above that the problem of students in learning reading is difficult or problem like the students english vocabulary is low.The students still confused to differentiate between analytical exposition text and another text. So that, the writer used small group discussion to teach reading analytical exposition text by content area in which the students can interpret the text based on the context. Therefor the students would be more engaged and more likely to retain what they are being taught in the classroom.

Based on data, small group discussion has significance effect to problem students,small group discussion can be solve method. In small group discussion the students working and discussion together,that can help the students elicit certain key vocabulary and phrases without having to directly translate, and so it would be helped the students associate common words and phreses with certain actions, which would be accelerated their learning and give them more confidence.