CHAPTER IV
THE RESULT OF THE RESEARCH

A. Description of The Data

In this chapter, the writer would like to present the description of the data obtained. The population of this study was first grade students classes of SMA N 1 Petir. As tasted in this chapter, the writer took 60 students as the sample. The goal of the research is intended to find out the accurate data in accord with the research title. So the sample in this study divide into two classes they are 30 students of X 7 as the control class and 30 student of X 8 as the experimental class. For the instrument, the writer used test namely there are pre-test and post-test for experiment and control class to know the effectiveness of smart card in developing student's writing recount text.

To know the result of the test, the writer make the table of the students score of pre-test and post-test, the result of the test are tabulated and calculated in table.

B. Data Analysis

Table 1.1
The score of pre-test result of experiment class

NO	NAME	Items					Total
		Content	Organization	Vocabulary	Mechanic	language use	
1	A. Haris Ramdan	15	13	8	3	13	52
2	A. Ginanjar	15	13	10	2	10	50
3	Ana Karlina	14	13	10	3	9	47
4	Arya Dwi Putra	15	14	9	3	11	62

5	Aulia Rahman	14	13	9	2	14	52
6	Bagus Respati	15	14	9	2	14	52
7	Cindy Setiawati	14	13	9	3	11	50
8	Dede Rahmat H.	15	13	11	4	10	58
9	Dewi Intan Rinjani	19	17	11	3	13	62
10	Dian Afrianti	16	14	10	2	11	58
11	Dini Nur Aprilianti	22	18	15	4	16	75
12	Dwitia M.	14	13	10	3	19	69
13	Eliyah	25	19	18	3	14	70
14	Gina Mulyani	20	15	16	4	16	70
15	Hana Haryanti	14	14	11	3	10	55
16	Hesti Sulistiawati	15	14	9	3	15	55
17	Irawati N.	19	15	14	3	17	68
18	Karunia Dewi	13	13	7	2	5	40
19	Lia Sunarti	13	13	10	2	5	45
20	Maryono	15	14	14	3	13	59
21	Maslia	14	15	11	3	11	55
22	M. Jayadillah	15	14	11	3	11	56
23	M. Wirdan H	13	14	14	3	12	56
24	Muniyati	14	13	12	3	12	54
25	Nanda Fitria	12	13	8	2	11	48
26	Riswan	14	13	9	2	10	48
27	Sahrul Faozi	15	14	10	3	13	56
28	Siti Umi Kulsum	13	13	8	2	8	44
29	Windi Agnesia	13	14	13	3	13	56
30	Yusniah	14	13	12	3	12	54
	N = 30						1666

Determine mean of pre-test experiment class by formula :

$$M = \frac{\sum X}{N}$$

M = Mean of pre-test
∑ = Total score
N = Number of sample

$$M = \frac{\sum X}{N}$$
$$= \frac{1666}{30}$$
$$= 55,5$$

The table above shows us about the students pre-test score based on criteria in writing skill at the experimental class. The data shows that the lowest score of pre test is 40,the highest score of pre-test is 75, and the average score of pre test is 55,5

Table 1.2
The score of post-test result of experiment class

NO	Respondent	Items					Total
		Content	Organization	Vocabulary	Mechanic	language use	
1	A. Haris Ramdan	21	18	12	4	14	69
2	A. Ginanjar	19	19	11	4	13	66
3	Ana Karlina	16	14	10	3	11	62
4	Arya Dwi Putra	15	14	10	3	12	66
5	Aulia Rahman	17	13	10	4	15	70
6	Bagus Respati	18	13	12	3	14	60
7	Cindy Setiawati	16	13	11	4	14	68
8	Dede Rahmat H.	24	18	12	4	17	70
9	Dewi Intan Rinjani	23	19	12	4	17	77
10	Dian Afrianti	25	19	12	4	17	68
11	Dini Nur Aprilianti	23	18	11	4	18	74
12	Dwitia M.	25	19	12	3	14	70

13	Eliyah	23	20	12	3	18	80
14	Gina Mulyani	23	22	12	4	19	84
15	Hana Haryanti	18	13	10	2	14	69
16	Hesti Sulistiawati	17	14	10	2	13	69
17	Irawati N.	23	19	13	4	14	72
18	Karunia Dewi	16	14	10	3	13	67
19	Lia Sunarti	18	14	11	4	15	62
20	Maryono	19	18	12	3	17	70
21	Maslia	22	18	12	3	16	76
22	M. Jayadillah	16	14	9	3	12	65
23	M. Wirdan H	24	19	11	4	17	62
24	Muniyati	23	18	12	4	16	64
25	Nanda Fitria	20	17	12	3	17	59
26	Riswan	24	17	13	3	16	62
27	Sahrul Faozi	24	18	12	4	15	72
28	Siti Umi Kulsum	18	17	10	3	13	58
29	Windi Agnesia	17	13	11	3	14	58
30	Yusniah	22	18	12	4	14	69
	N = 30						1950

To determine mean of post-test experiment class by formula :

$$M = \frac{\sum X}{N}$$

M = Mean of post-test
$\sum$ = Total score
N = Number of sample

$$M = \frac{\sum X}{N}$$
$$= \frac{1950}{30}$$
$$= 65$$

The table above shows us about the students pre-test score based on criteria in writing skill at the experimental class. The data also

shows that the lowest score of post-test is 58, the highest score of post-test is 84, and the average score of pre test is 65.

Table 2.1
The score of pre-test of control class

NO	Respondent	Items					Total
		Content	Organization	Vocabulary	Mechanic	language use	
1	Alda Dahlia	17	13	9	2	11	51
2	Ardi Nugraha	18	12	10	2	11	52
3	Atika Reza Y.	17	12	10	3	10	52
4	Ayu Lestari	14	13	7	2	5	42
5	Chaerul Umam	16	14	9	2	10	50
6	Desty Setiawaty	17	14	10	3	10	53
7	Dewi Unis S.	16	14	9	2	10	50
8	Diana Sapitri	19	15	12	3	13	58
9	Ernawati	20	17	10	3	12	65
10	Ersa Apriliani	23	19	11	3	14	71
11	Farhan Arifan	21	17	11	3	13	69
12	Ghalih Rahmawan	14	13	8	2	6	45
13	Ibnu Saputra	23	17	10	3	14	69
14	Imam Ardi S.	18	12	10	3	10	52
15	Imas Fitriyani	18	16	11	3	14	62
16	Irfan Anshori	20	17	10	3	14	66
17	Iskandar	17	14	11	3	12	56

18	Jaenudin	18	13	10	4	12	42
19	Maerani	20	17	11	4	16	63
20	Malihatul Fitriah	20	18	11	4	15	69
21	Muhamad Nasor	20	19	12	4	16	54
22	Muhamad Rifai	18	17	10	3	14	56
23	Muhamad Deni S.	17	13	11	4	14	58
24	Nida Mustafidah	17	15	8	2	11	45
25	Nurlela	18	14	9	3	12	48
26	Peni	16	14	8	3	12	48
27	Sihabudin	19	15	10	3	12	55
28	Sindiah	14	14	8	2	8	44
29	Siti Atikah	18	16	10	4	14	56
30	Windi Astuti	16	13	10	2	13	54
	N = 30						1660

$$M = \frac{\sum X}{N}$$

$$= \frac{1660}{30}$$

= 55,3

From the score pre-test above, can conclude that the score before treatment is low. It's has only 42 and higher score is 70. In this class the researcher not use smart card in teaching writing.

Table 2.2
The score of post-test of control class

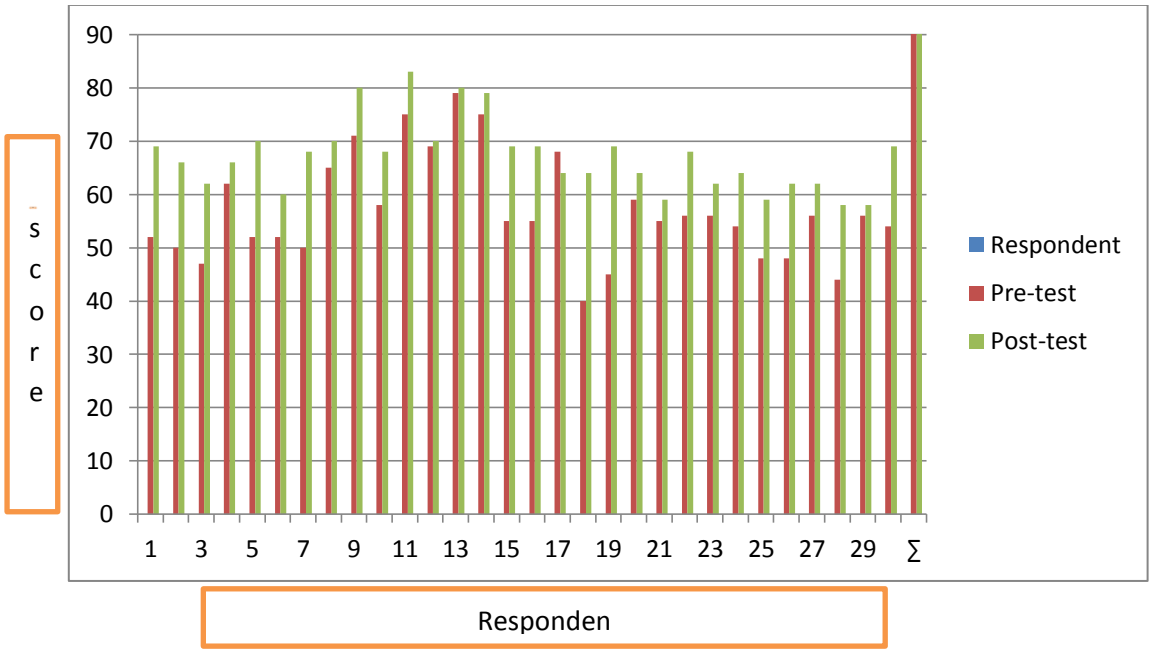
NO	Respondent	Items					Total
		Content	Organization	Vocabulary	Mechanic	language use	
1	Alda Dahlia	18	13	11	4	14	60
2	Ardi Nugraha	19	17	12	3	13	65
3	Atika Reza Y.	18	15	10	2	12	57
4	Ayu Lestari	14	13	7	2	10	45
5	Chaerul Umam	17	15	9	2	11	51
6	Desty Setiawaty	18	15	10	2	11	71
7	Dewi Unis S.	17	13	9	2	10	62
8	Diana Sapitri	17	16	12	4	13	70
9	Ernawati	19	19	11	3	16	55
10	Ersa Apriliani	22	19	13	4	17	71
11	Farhan Arifan	17	15	12	4	14	68
12	Ghalih Rahmawan	17	14	11	2	11	61
13	Ibnu Saputra	24	16	11	3	14	70
14	Imam Ardi S.	18	15	10	3	14	69
15	Imas Fitriyani	20	17	9	4	16	62
16	Irfan Anshori	19	16	11	3	13	61
17	Iskandar	15	14	12	2	10	67
18	Jaenudin	18	13	10	4	11	67
19	Maerani	19	11	7	4	14	64
20	Malihatul Fitriah	18	14	10	3	13	64
21	Muhamad Nasor	19	16	11	3	12	64
22	Muhamad Rifai	18	17	10	3	12	59
23	Muhamad Deni S.	18	15	10	3	9	59
24	Nida Mustafidah	14	13	10	3	10	50
25	Nurlela	15	14	8	3	13	57
26	Peni	18	13	10	3	12	59
27	Sihabudin	19	13	9	3	9	50
28	Sindiah	13	17	9	3	11	61

29	Siti Atikah	18	17	10	3	11	62
30	Windi Astuti	22	20	14	4	15	75
	N = 30						1821

$$M_2 = \frac{\sum X_2}{N}$$
$$= \frac{1821}{30}$$
$$= 60, 7$$

Based on data above can conclude that the writing score post-test control class has good score. The low score 47, and the higher score is 75. In this class the researcher teach without using smart card.

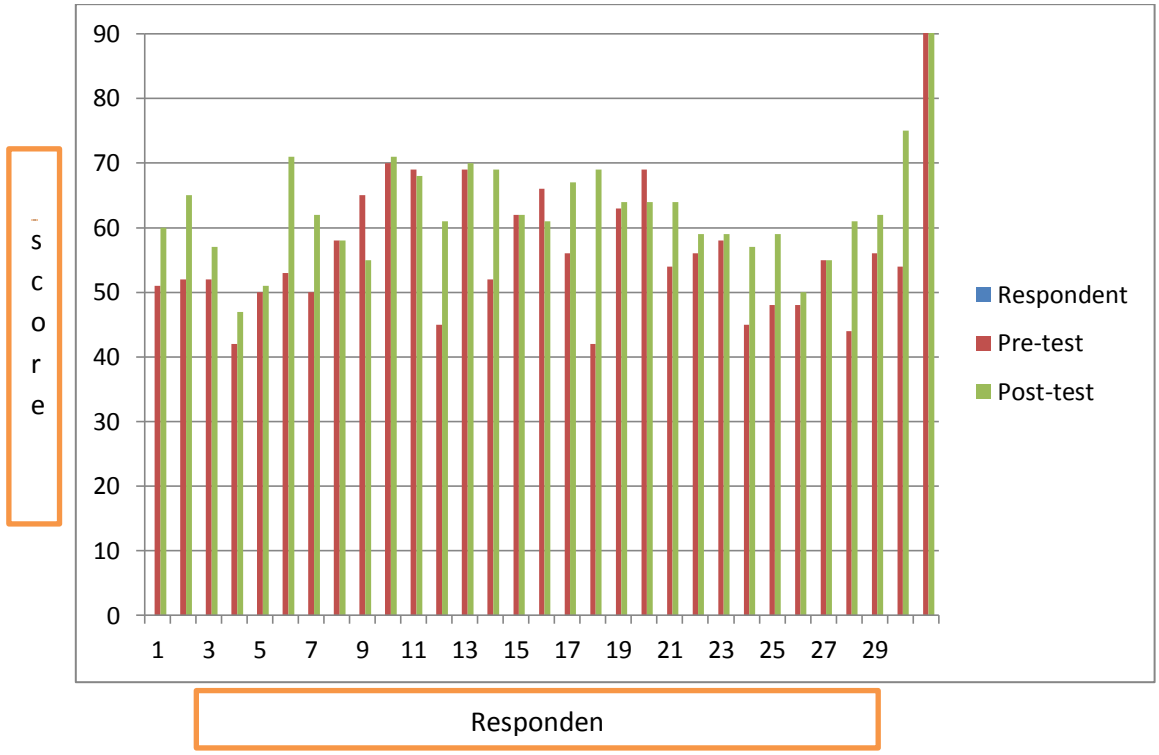
Graphic 3.1
Frequency distribution of score pre-test and post-test
The experimental class



The graphic above show us about pre-test and post-test The experimental class. According to the graphic above the score of pre-test

at the experimental class as the writer know from the low value is 40 and high value is 79. The graphic above the score of post-test at the experimental class as the writer know from the low value 58 and high value is 83. There are from pre-test to the post test, and the score is very good.

Graphic 3.2
Frequency distribution of score pre-test and post-test
The control class



The graphic above show us about pre-test and post-test the control class. According to the graphic above the score of pre-test at the control class as the writer know from the low value is 42 and high value is 70. The graphic above the score of post-test at the control class

as the writer know from the low value 47 and high value is 75. There are from pre-test to the post test, and the score is good.

Table 2.3

The Frequency of Distribution Score of Post-Test at the Experiment Class

NO	X_1	X_2	x_1 (X_1-M_1)	x_2 (X_2-M_2)	x_1^2	x_2^2
1	69	60	4	-0,7	16	0,49
2	66	65	1	4,3	1	18,49
3	62	57	-3	-3,7	9	13,69
4	66	47	1	-13,7	1	187,69
5	70	51	5	-9,7	25	94,09
6	60	71	-5	10,3	25	106,09
7	68	62	3	1,3	9	1,69
8	70	58	5	-2,7	25	7,29
9	80	55	15	-5,7	225	32,49
10	68	71	3	10,3	9	106,09
11	83	57	18	-3,7	7,97	13,69
12	70	61	5	0,3	25	0,09
13	80	70	15	9,3	225	86,49
14	79	69	14	8,3	196	68,89
15	69	62	4	1,3	16	1,69
16	69	61	4	0,3	16	0.09
17	64	67	-1	6,3	1	39,69
18	64	67	-1	6,3	1	39,69
19	69	64	4	3,3	16	10,89
20	70	64	50	3,3	25	10,89
21	59	64	-6	3,3	36	10,89
22	68	59	3	-1,7	9	2,89
23	62	59	-3	-1,7	9	2,89
24	64	57	-1	-3,7	1	13,69
25	59	59	-6	-1,7	36	2,89

26	62	50	-3	-10,7	9	114,49
27	62	55	-3	-5,7	9	32,49
28	58	61	-7	0,3	49	0,09
29	58	62	-7	1,3	49	1,69
30	62	75	-3	14,3	9	204,49
∑	1950	1821	105	19	1089,97	1226,7

X_1 = Nilai post-test experiment
X_2 = Nilai post-test control
$x_1 = X_1 - M_1$
$x_2 = X_2 - M_2$
After that, the writer calculated them based the t-test formula

$$M_1 = \frac{\sum X_1}{N} \qquad M_2 = \frac{\sum X_2}{N}$$

$$= \frac{1950}{30} \qquad = \frac{1821}{30}$$

$$= 65 \qquad = 60,7$$

$$t = \frac{M_1 - M_2}{\sqrt{\left\{\frac{\sum X_1^2 + \sum X_2^2}{N_1 + N_2 - 2}\right\}\left\{\frac{N_1 + N_2}{N_1.N_2}\right\}}}$$

$$= \frac{65 - 60,7}{\sqrt{\left\{\frac{1089,97 + 1226,7}{30 + 30 - 2}\right\}\left\{\frac{30 + 30}{30.30}\right\}}}$$

$$= \frac{4,3}{\sqrt{\left\{\frac{2316,67}{58}\right\}\left\{\frac{60}{900}\right\}}}$$

$$= \frac{4,3}{\sqrt{\{39,94\}\{0,06\}}}$$

$$= \frac{4,3}{\sqrt{2,39}}$$

$$= \frac{4,3}{1,54}$$

$$= 2,79$$

Df $= N_1 + N_2 - 2$
$= 30 + 30 - 2$
$= 58$

C. Interpretation of the Data

From the result of experiment class is mean of pre-test score 55,5 and post-test score 65. The result of control class is mean of pre-test 55,3 and post-test 60,7 so, it's means that mean of control class is lower than experiment class. To prove it, the data obtained from the experimental class and control class are calculated with assumption as follow:

If to> tt the alternative hypothesis is accepted, it's means that there is significant between using media smart card and without media smart card.

If to< tt the alternative hypothesis is rejected. It's means that there is not significant between using media smart card and without media smart card.

Based on calculated above is know that t_{table} with level significance 5%= 2,00 and with level significance 1%= 2,65 so $t_{account}$ = 2,79. So, 2,00 < 2,79 >2,65. It's means that $t_o > t_t$, and the writer conclude the alternative hypothesis is accepted. In practice mean that there is significant effectiveness of smart card in developing student's writing recount text.