CHAPTER IV
RESULT AND DISCUSSION

A. Description of Data

In this chapter the writer would like to present the description of data obtained. As the writer explained in the previous chapter that the population in this research were 89 students of first grade in MTs Al-Hidayah and the sample were 30 students of VIII A as experimental class and 30 students of VIII B as control class.

In this research, the writer did an analyze of quantitative data. The data is obtained by giving test to the experimental class and control class. The test divided two types are pre-test and post-test. The research also gives pre-test before teaching in the class. The research also gives post-test in the experiment class after teaching by using picture and gives post-test in control class after teaching without picture.

1. Experimental Class

The researcher describes the result of pre-test in experiment class by the table as follow:

Table 4.1

The Students Score of Pre-test at the Experimental Class

No	Name	Items					score
		C	O	LU	V	M	
1	AA	15	8	5	7	2	27
2	AM	18	11	17	11	2	59
3	AH	23	11	18	13	3	78

4	AT	24	15	20	16	3	29
5	AU	13	7	5	7	2	49
6	BK	20	12	7	8	2	45
7	FL	20	7	8	8	2	78
8	FR	25	16	19	15	3	43
9	HNS	17	11	6	7	2	29
10	HNH	13	5	7	7	2	50
11	HR	15	9	11	12	3	80
12	IW	23	15	23	16	3	29
13	JJ	13	5	7	7	2	29
14	KH	13	7	5	7	2	29
15	LR	13	7	5	7	2	80
16	MN	23	15	23	16	3	29
17	NB	13	7	5	7	2	43
18	ND	17	10	11	13	2	57
19	RD	20	12	3	10	2	36
20	RS	14	7	6	7	2	36
21	RW	23	15	23	16	3	80
22	RF	22	11	18	15	3	69
23	RZ	13	7	5	7	2	29
24	RH	14	7	5	7	2	35
25	SB	17	7	7	8	2	41
26	SD	13	7	5	7	2	29
27	SH	17	9	6	7	2	37
28	TBH	13	7	5	7	2	29
29	UN	22	14	11	14	2	63

30	UM	22	13	18	13	2	68
N=30	**TOTAL**						**∑X = 1447**
	AVERAGE						**M=48,23**

The table above shows the students writing skills at the second grade of MTs Al-Hidayah in experimental class before treatment is far enough. It can be known from the result of the pre test, the highest score is 80 and the lowest score is 27.

Note:

C   : Content

O   : Organization

LU   : Language Use

V   : Vocabulary

M   : mechanic

Mean of pre-test:

$$X = \frac{\sum X}{N} = \frac{1447}{30} = 48,23$$ (the mean of pre-test experimental class is 48,23)

Table 4.2

The Students Score of Post-test at the Experimental Class

No	Name	Items					score
		C	**O**	**LU**	**V**	**M**	
1	AA	22	13	13	10	2	60
2	AM	26	19	17	16	4	82
3	BK	22	13	17	15	4	71
4	FL	22	14	24	14	3	77

5	FR	22	13	17	15	4	71
6	HNS	22	13	17	15	3	70
7	HNH	22	13	17	15	3	70
8	HR	22	14	13	11	3	54
9	IW	22	13	17	15	3	70
10	JJ	22	14	13	11	3	54
11	KH	22	14	13	11	3	54
12	LR	24	18	16	14	4	76
13	MN	22	13	13	10	2	60
14	NB	22	13	17	15	3	70
15	ND	23	18	15	14	4	74
16	RD	22	13	17	15	3	70
17	RS	30	21	10	13	2	76
18	RW	22	15	17	13	3	70
19	RF	24	18	16	14	4	76
20	RZ	22	13	13	10	2	60
21	RH	25	17	19	17	4	82
22	SB	26	17	20	15	3	81
23	SD	30	21	10	13	2	76
24	SH	22	13	13	10	2	60
25	TBH	22	13	17	15	2	70
26	UN	22	13	14	10	2	61
27	UM	22	13	17	15	4	71
28	TBH	22	13	17	15	3	70
29	UN	50	10	11	7	3	81

30	UM	20	15	17	18	3	73
N=30	**TOTAL**						**∑X = 2090**
	AVERAGE						**M=69,67**

The table above shows the students writing skills at the second grade of MTs Al-Hidayah in experimental class. After treatment is good enough. It can be known from the result of the pre test, the highest score is 82 and the lowest score is 54.
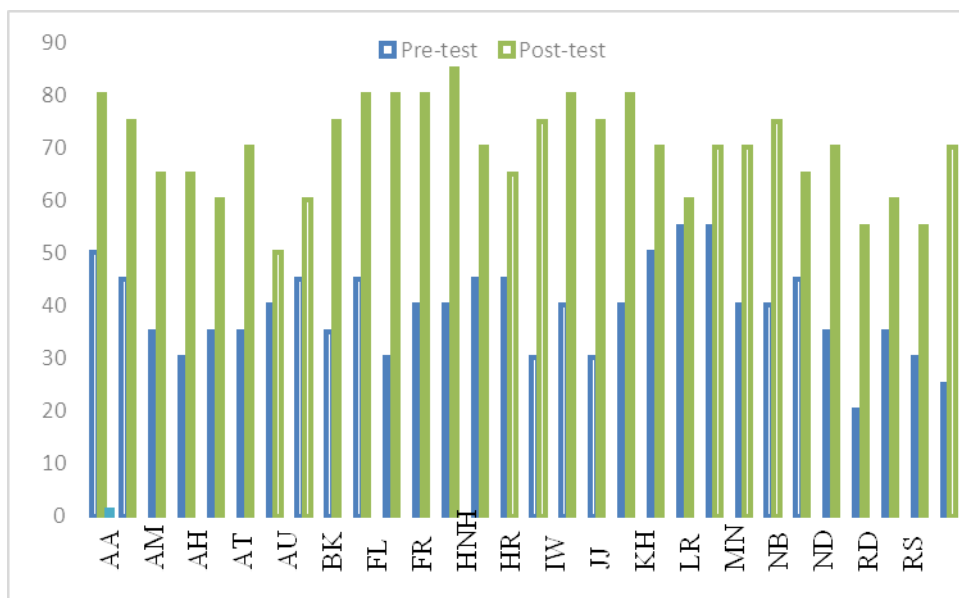
Note:

C : Content

O : Organization

LU : Language Use

V : Vocabulary

M : mechanic

Mean of pre-test:

$$X = \frac{\sum X}{N} = \frac{2090}{30} = 69,67 \quad \text{(the mean of post-test}$$

experimental class is 69,27)

Based on the calculation on table 4.1 of pre-test and 4.2 post-test assesment at experimental class, it showed that the result of experiment class got the well improvement after giving treatment. It seen from the average score of post test is better than average score pre-test, that is 69,27 > 48,23. The students improvement score caused by the researcher used the diagramming technique in teaching learning process. If seen from the students improvement score it means that the program used is succes in improving students writing in narrative text with cartoon picture media.

The researcher describe the students improving score of pre-test and post-test at the experimental class by the graphic as follow:

The graphic above showed about the comparison between score of pre-test and post-test at the experimental class. According to the graphic above the score of post-test is better than the score of pre-test commonly.

2. The score of pre-test and post-test of control class

Table 4.3

The Students Score of Pre-test at the Control Class

No	Name	Items					score
		C	O	LU	V	M	
1	AH	17	10	10	9	2	48

2	AF	14	7	5	2	2	25
3	AFN	13	7	5	7	2	34
4	BR	14	8	5	7	2	37
5	DR	23	12	6	15	2	72
6	DS	17	8	20	7	2	31
7	FK	24	15	7	16	3	77
8	FG	14	8	19	7	2	38
9	HMM	14	7	7	7	2	36
10	HF	17	7	6	8	2	41
11	IMD	17	7	7	8	2	40
12	LA	19	12	11	9	2	54
13	LS	14	7	15	7	2	35
14	MG	13	7	5	7	2	29
15	MK	17	9	8	7	2	43
16	MR	17	10	6	9	2	44
17	ND	18	10	11	9	2	50
18	NH	17	9	10	9	3	47
19	NR	13	7	6	7	2	35
20	SD	16	9	10	9	2	46
21	SF	22	12	11	8	2	58
22	SA	24	15	18	11	4	65
23	SH	16	9	10	8	2	46
24	SMS	12	8	10	8	2	44
25	SU	17	10	5	12	2	51
26	SF	20	9	7		2	49
27	TY	15	12	8	8	2	45

28	WD	17	10	6	8	2	43
29	YA	17	10	11	12	2	52
30	AD	22	11	18	14	2	67
N=30	**TOTAL**						**∑X = 1382**
	AVERAGE						**M=46,06**

The table above shows the students writing skills at the second grade of MTs Al-Hidayah in control class. Before treatment is fair enough. It can be known from the result of the pre test, the highest score is 67 and the lowest score is 25.

Note:

C   : Content

O   : Organization

LU   : Language Use

V   : Vocabulary

M   : mechanic

Mean of pre-test:

$$X = \frac{\sum X}{N} = \frac{1382}{30} = 40,06 \text{ (the mean of pre-test control class}$$

is $40,06$)

Table 4.4

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

No	Name	Items					score
		C	**O**	**LU**	**V**	**M**	
1	AH	17	11	15	9	3	55
2	AF	17	11	15	9	3	55
3	AFN	19	12	11	9	3	54

4	BR	14	8	5	9	3	55
5	DR	23	12	6	15	2	62
6	DS	17	8	20	7	2	50
7	FK	24	15	7	16	3	61
8	FG	14	8	19	7	2	54
9	HMM	14	7	7	7	2	50
10	HF	17	7	6	8	2	61
11	IMD	17	7	7	8	2	50
12	LA	19	12	11	9	2	61
13	LS	14	7	15	7	2	55
14	MG	13	7	5	7	2	50
15	MK	17	9	8	7	2	63
16	MR	17	10	6	9	2	44
17	ND	18	10	11	9	2	50
18	NH	17	9	10	9	3	47
19	NR	13	7	6	7	2	45
20	SD	16	9	10	9	2	46
21	SF	22	12	11	8	2	58
22	SA	24	15	18	11	4	65
23	SH	16	9	10	8	2	46
24	SMS	12	8	10	8	2	44
25	SU	17	10	5	12	2	55
26	SF	20	9	7		2	55
27	TY	15	12	8	8	2	45
28	WD	17	10	6	8	2	43
29	YA	17	10	11	12	2	52

30	AD	17	11	15	9	3	55
N=30	**TOTAL**						**∑X = 1658**
	AVERAGE						**M=55,26**

The table above shows the students writing skills at the second grade of MTs Al-Hidayah in control class. after treatment is good enough. It can be known from the result of the post-test, the highest score is 65 and the lowest score is 43.
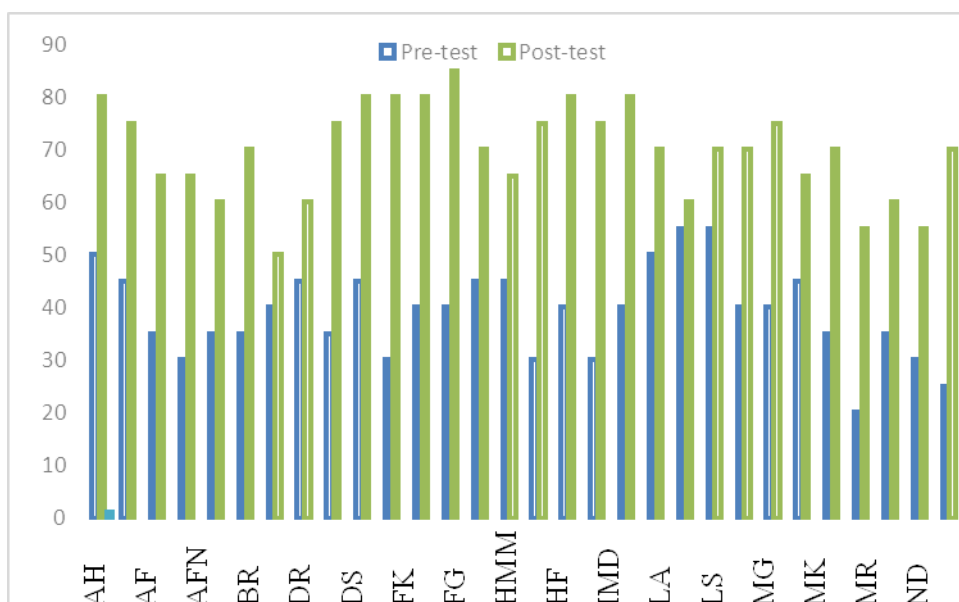
Note:

C   : Content

O   : Organization

LU   : Language Use

V   : Vocabulary

M   : mechanic

Mean of pre-test:

$$X = \frac{\sum X}{N} = \frac{1658}{30} = 55,26 \text{ (the mean of post-test control class}$$

is $55,26$)

Based on the calculation on table 4.3 of pre-test and 4.4 post-test assesment at control class, it showed that the result of experiment class got the well improvement after giving treatment. It seen from the average score of post test is better than average score pre-test, that is 55,25 > 46,26. The students improvement score caused by the researcher used the diagramming technique in teaching learning process. If seen from the students improvement score it means that the program used is succes in improving students writing in narrative text with cartoon picture media.

The researcher describe the students improving score of pre-test and post-test at the experimental class by the graphic as follow:

The graphic above showed about the comparison between score of pre-test and post-test at the control class. According to the graphic above the score of post-test is better than the score of pre-test commonly.

B. Data Analysis

After getting the data from the post-test score of two classes, then the researcher analyzed it by using t-test. The result calculation of post-test at the experimental class and the control class would be described in the following table:

Note :

X_1 = Score Post-test (Experimental Class)

X_2 = Score Post-test (Control Class)

$x_1 = X_1 - M_1$(Mean X_1)

$x_2 = X_2 - M_2$ (Mean X_2)

x_1^2 = The Squared Value of x_1

x_2^2 = The Squared Value of x_2

From the table above, the researcher got the data $\sum X_1 = 1447$ $\sum X_2 = 2090$, $\sum x_1^2 = 1382$ $\sum x_2^2 = 1658$ where as $N_1 = 30$ and $N_2 = 30$. After that the writer calculated them based on the t-test formula, the steps as follow:

1. Determine mean of variable X_1 and X_2

    Variable X_1 $M_1 = \dfrac{\sum x_1}{N_1} = \dfrac{1447}{30} = 78{,}23$

    Variable X_2 $M_2 = \dfrac{\sum x_2}{N_2} = \dfrac{2090}{30} = 69{,}67$

2. Determine t-test

    $\sum x_1^2 = 3435$

    $\sum x_2^2 = 3511$

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

    $$t_o = \dfrac{M_1 - M_2}{\sqrt{\left(\dfrac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right)\left(\dfrac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

$$= \frac{78-69}{\sqrt{\left(\frac{3435+3511}{30+30-2}\right)\left(\frac{30+30}{30 \cdot 30}\right)}}$$

$$= \frac{9}{\sqrt{\left(\frac{6946}{58}\right)\left(\frac{60}{900}\right)}}$$

$$= \frac{9}{\sqrt{119,75 \times 0,067}} = \frac{9}{\sqrt{8,23}} = \frac{9}{3,7}$$

$$= 2,43$$

So after the writer calculates this data based on the formula t-test, the obtained t_o or $t_{observation}$ was 2,43

C. Hypothesis Testing

The data obtained from experimental class and control class were calculated with the assumption as follow:

If $t_0 > t_t$: the alternative hypothesis was accepted. It means there was significant difference of teaching writing narrative text using cartoon picture and without using cartoon picture. If $t_0 < t_t$: null hypothesis was rejected. It means there was no significant difference of teaching writing narrative text using cartoon picture and without it.

From the result of calculation above, it is obtained that the value of t_o $(t_{observation})$ was 2,43 the degree of freedom (df) = 69. In the degree significance 5% = 1,39 in degree of significance 1% = 0,67. After that the writer compared the data with t_t (t table) both in degree significance 5% and 1%. Therefore $t_o : t_t$ =2,43 > 2,39 in

degree of significance 5% and $t_o : t_t$ = 2,43 > 1,39 in degree significance 1%.

The statistic hypothesis states that if t_o is higher than t_t, it shows that H_a(alternative hypothesis) of the result is accepted and H_o(null hypothesis) is rejected. It means that there was difference of teaching writing narrative text using cartoon picture and without picture.

D. Interpretation Data

From the result of the research that the mean of pre-test score obtained by students of MTs Al-Hidayah in the class VIII A (experimental class) 44 was highest than class VIII B (control class) 39. The highest score of pre-test in VIII A (experimental class) was 65 and in the class VIII B(control class) was 55. The lowest score of pre-test in class VIII A (experimental class) was 25 and in the class VIII B (control class) was 20. It means that the distribution of score in control class score was smaller than experimental class.

The mean of post-test score in experimental class was 78 was greater than in control class was 69. The highest score in experimental class was 100 and in control class was 85. The lowest score in experimental class was 65 and in control class was 45. It means that the distribution of score post-test in experimental class was greater than class control.

Based on the data obtained from the research of experimental class and control class among average score, t observation and comparison with t table. The writer summarize that the students taught by using picture media has significance effect or significant

improved on student writing especially narrative text than the students taught without using cartoon picture media.

The students who taught by using cartoon picture media were easily to student writing skill, and many activities by using cartoon picture media that can make them more active in learning writing on narrative text using cartoon picture.