CHAPTER IV

RESEARCH FINDINGS AND ANALYSIS

A. Profile of the School

The research was conducted in SMP N 23 Semarang. It was located in street RM Hadi Subeno, Wonolopo, Mijen, Semarang. The profile of the school is as follows:

1. Name of school : SMP Negeri 23 Semarang
2. Address : Street RM Hadi Subeno, Wonolopo Mijen Semarang
3. Phone : (024) 7711053
4. Village : Wonolopo
5. Subdistrict : Mijen
6. Regency/ City : Semarang
7. Headmaster : Drs. R. Sutrisno
8. School Category : State, Accredited A in 2011
9. Year of Existence : 1979
10. Year of Operational : 1980
11. Ownership Land : Ownership Government
    a. Wide Area : 12.741 m^2
    b. Building Area : 4200 m^2
12. The Number of Students

    The number of students in SMPN 23 Semarang since four years latest were 3306 students. It could be seen on the table below:

Table 4.1

Number of Students in SMPN 23 Semarang

Class	**Number of Students**			
	2009/2010	**2010/2011**	**2011/2012**	**2012/2013**
VII	280	250	288	288
VIII	276	280	257	290
IX	293	276	278	250
Sum	**849**	**806**	**823**	**828**

13. Data of Room
    c. Data Classroom : 24 Classrooms
    d. Data Other Room
       Library : 1
       Science Laboratory : 1
       Language Laboratory : 1
       Computer Laboratory : 1
       Multimedia : 1
       TIK : 1
14. Number of Teachers and Official Employees

    Number of teachers and employees in SMPN 23 Semarang were 41. It consisted of 39 permanent (PNS) teachers and 2 non permanent teachers.

B. Description of Research Finding

The researcher did the research using statistical data analysis to find out whether or not there is a significant difference of students' achievement on simple past tense between students who are taught using the little mermaid film and students who are taught without using the little mermaid film.

The implementation of this research was divided into two classes. They were experimental class (VIII G) and control class (VIII F). Before the activities were conducted, the research determined the materials and lesson plan of learning. Learning in the experimental class was conducted using film as a medium, while the control class using conventional method (without using film as a medium).

There were two tests in this research, they were pre test and post test. Pre test was given before the students, both experimental and control students, followed the learning process. Before pre test was given to the students, the researcher gave try out test to analyze validity, reliability, difficulty level and also the discrimination power of each item. The researcher prepared 20 items as the instrument of test. It consisted of 10 multiple choice and 10 completion test.

Post test was given to both experimental and control group after the learning process to obtain the data that was analyzed.

C. Analysis of the Data

1. Analysis of Try-out Test

This discussion covered validity, reliability, level of difficulty and discriminating power.

a. Validity of Instrument

In this study, item validity was used to know the index validity of the test. To know the validity of instrument, the researcher used the Pearson product moment formula to analyze each item.

In try out test, there are 20 items which consist of 10 multiple choice and 10 completion. It was obtained that from all of the test items were valid. They werevalid with the reason the computation result of their r_{xy} value (the correlation of score each item) was higher than their r_{table} value.

The following was the example of item validity computation for item number 1 and for the other items would use the same formula.

N = 35 $\sum Y$ = 417

$\sum XY$ = 272 $\sum X^2$ = 18

$\sum X$ = 18 $\sum Y^2$ = 6125

$$r_{xy} = \frac{N\sum XY - \sum(X)\sum(Y)}{\sqrt{\left\{N\sum X^2 - \left(\sum X\right)^2\right\}\left\{N\sum Y^2 - \left(\sum Y\right)^2\right\}}}$$

$$r_{xy} = \frac{35(272) - 18(417)}{\sqrt{\left\{35(18) - (18)^2\right\}\left\{35(6125) - (417)^2\right\}}}$$

$$r_{xy} = \frac{9520 - 7506}{\sqrt{(630 - 324)(217525 - 173889)}}$$

$$r_{xy} = \frac{2014}{\sqrt{306 \times 43636}}$$

$$r_{xy} = \frac{2014}{\sqrt{13352616}}$$

r_{xy} = 0,4481

From the computation above, the result of computing validity of the item number 1 was 0.4481. After that, the researcher consulted the result to the table of r Product Moment with the number of subject (N) =40 and significance level α = 5%, it was 0.334. Since the result of the computation was higher than r in table, the index of validity of the item number 1 was considered to be valid.

b. Reliability of Instrument

A good test must be valid and reliable. To get the coefficient of correlation, the researcher applied the *product-moment* formula and then continued to the *spearman-brown* formula.

Before computing the reliability, the researcher had to compute *product moment* formula (r_{xy}) with the formula below:

N = 3 $\sum XY = 1538$

$\sum Y$ = 224 $\sum X^2$ = 1586

$\sum Y^2$ = 1638 $\sum X$ = 222

$$r_{xy} = \frac{N\sum XY - \sum(X)\sum(Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

$$r_{xy} = \frac{15(1538) - (222)(224)}{\sqrt{\{15(1586) - (222)^2\}\{15(1638) - (224)^2\}}}$$

$$r_{xy} = \frac{23070 - 49728}{\sqrt{(23790 - 49284)(24570 - 50176)}}$$

$r_{xy} =$ 0,6146

After finding *product moment* formula (r_{XY}) the computation was continued to the *spearman-brown* formula as follow:

$$r_{11} = \frac{2 \times r_{xy}}{\sqrt{1 + r_{xy}}}$$

$$r_{11} = \frac{2x0,615}{1 + 0,61}$$

$$r_{11} = 0,761$$

From the computation above, it was found out that r_{11} (the total of reliability test) was 0.761 whereas the number of subjects was 35 and the critical value for r-table with significance level 5% was 0.334. Thus, the value resulted from the computation was higher than its critical value. It could be concluded that the instrument used in this research was reliable.

c. The Level of Difficulty

The following was the computation of the level difficulty for item number 1 and for the other items would use the same formula.

R = 14+6

N = 35

$$FR = \frac{R}{N}$$

$$FR = \frac{14+6}{35}$$

$$FR = 0{,}57$$

It was proper to say that the index difficulty of the item number 1 above can be said as the medium category, because the calculation result of the item number 1 was in the interval 0.30 $\leq FR \leq 0{,}70$

After computing 20 items of the try-out test, there were 3 items were considered to be easy, they were number 8, 10, and 19. There were 17 items were considered to be medium, They were number 1, 2, 3, 4, 5, 6, 7,9, 11, 12, 13, 14, 15, 16, 17, 18, 20. and there were no difficult test.

d. The Discriminating Power

The discrimination power of an item indicated the extent to which the item discriminated between the tested, separating the more able tested from the less able. The index of discriminating power told us whether those students who performed well on the whole test tended to do well or badly on each item in the test. To do this analysis, the number of try-out subjects was divided into two groups. They were upper and lower group.

Table 4.2

The Table of Discriminating Power

Upper Group			**Lower Group**		
No	**Code**	**Score**	**No**	**Code**	**Score**
1	T-20	0	1	T-23	0
2	T-27	1	2	T-13	0
3	T-24	1	3	T-35	1
4	T-08	0	4	T-18	1
5	T-25	1	5	T-15	1
6	T-22	1	6	T-04	1
7	T-05	1	7	T-17	0
8	T-32	1	8	T-14	0
9	T-10	1	9	T-01	0
10	T-11	1	10	T-09	0
11	T-26	1	11	T-19	0
12	T-29	1	12	T-03	0
13	T-06	0	13	T-21	0
14	T-12	1	14	T-30	0
15	T-34	0	15	T-02	0
16	T-07	1	16	T-16	1
17	T-28	1	17	T-31	1
Jumlah		**13**	**Jumlah**		**6**

T : Try Out Student

The following was the computation of the discriminating power for item number 1, and for other items would use the same formula.

n =17

U=13

L=6

$$D = \frac{Correct\ U - Correct\ L}{n}$$

$$D = \frac{13 - 6}{17}$$

$$D = \frac{7}{17}$$

D=0,41

According to the criteria, the item number 1 above was medium category, because the calculation result of the item number 1 was in the interval $0.20 \leq D \leq 0.40$.

After computing 20 items of try–out test and after being consulted to the discriminating power category, there were 8 items were considered to be good, 12 items were medium.

2. Analysis of Pre Test

It was done to know the normality, homogenity, and the average similarity of the initial data in the experimental and control class.

a. The Data Analysis of Pre Test Scores of the Experimental Class and the Control Class

Table 4.3

The list of Pre-test Scores of the Experimental and Control Class

Experimental			Control		
No	**Code**	**Score**	**No**	**Code**	**Score**
1	E-01	60,00	1	C-01	75,00
2	E-02	70,00	2	C-02	65,00
3	E-03	75,00	3	C-03	65,00
4	E-04	60,00	4	C-04	75,00
5	E-05	65,00	5	C-05	65,00
6	E-06	70,00	6	C-06	75,00
7	E-07	60,00	7	C-07	40,00
8	E-08	80,00	8	C-08	60,00
9	E-09	65,00	9	C-09	70,00
10	E-10	80,00	10	C-10	75,00
11	E-11	55,00	11	C-11	65,00
12	E-12	65,00	12	C-12	65,00
13	E-13	60,00	13	C-13	80,00
14	E-14	50,00	14	C-14	45,00
15	E-15	55,00	15	C-15	60,00
16	E-16	40,00	16	C-16	65,00
17	E-17	70,00	17	C-17	60,00
18	E-18	65,00	18	C-18	65,00
19	E-19	75,00	19	C-19	55,00
20	E-20	50,00	20	C-20	75,00
21	E-21	65,00	21	C-21	50,00
22	E-22	60,00	22	C-22	65,00
23	E-23	75,00	23	C-23	65,00
24	E-24	65,00	24	C-24	75,00
25	E-25	65,00	25	C-25	65,00
26	E-26	60,00	26	C-26	75,00
27	E-27	45,00	27	C-27	70,00
28	E-28	50,00	28	C-28	75,00
29	E-29	70,00	29	C-29	60,00
30	E-30	65,00	30	C-30	70,00

31	E-31	75,00	31	C-31	55,00
32	E-32	65,00	32	C-32	50,00
33	E-33	55,00	33	C-33	60,00
34	E-34	75,00	34	C-34	85,00
35	E-35	70,00	35	C-35	60,00
			36	C-36	70,00
S	=	2230	S	=	2350
n_1	=	35	n_2	=	36
$\bar{x}_1$	=	63,71	$\bar{x}_2$	=	65,28
s_1^2	=	93,1513	s_2^2	=	95,6349
s_1	=	9,651	s_2	=	9,779

b. Normality of the Initial Data in Experimental and Control Class

1) Normality of Pre Test in Experimental Class

The normality test was used to know whether the data obtained was normally distributed or not. Test data of this research used the formula of chi-square.The formula was used:

$$X^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i}$$

Hypothesis:

Ho: The distribution list is normal.

Ha: The distribution list is not normal

The computation of normality test:

Maximum score = 80,00

N = 35

Minimum score = 40,00

Range = 40,00

K / Number of class = 6

Length of the class = 6,7

$\sum x$ = 80,50

$\bar{x}$ = 63,7

S = 9,7

Table 4.4

Normality Test of Pre-test of Experimental Class

Class Interval	Bk	Z_i	$P(Z_i)$	Wide Area	E_i	O_i	$\frac{(O_i - E_i)^2}{E_i}$
40,00 - 46,00	39,50	-2,51	0,4939	0,0312	1,092	2	0,756
47,00 - 53,00	46,50	-1,78	0,4628	0,1077	3,770	3	0,157
54,00 - 60,00	53,50	-1,06	0,3550	0,2246	7,861	9	0,165
61,00 - 67,00	60,50	-0,33	0,1304	0,2830	9,905	9	0,083
68,00 - 74,00	67,50	0,39	0,1526	0,2156	7,544	5	0,858
75,00 - 81,00	74,50	1,12	0,3681	0,0992	3,472	7	3,584
	81,5	1,84	0,4673			35	
						X_2	5,603

With α = 5% and df = 6-3=3, from the chi-square distribution table, obtained X_{table} = 7,815. Because

X^2_{count} is lower than X^2_{table} (5,603<7,815). So, the distribution list was normal.

2) Normality of Pre Test in Control Class

Maximum score	= 85,00
N	= 36
Minimum score	= 40,00
Range	= 45,00
K / Number of class	= 6
Length of the class	= 7,5
$\sum x$	= 85,50
$\bar{x}$	= 65,3
S	= 9,8

Table 4.5

Normality Test of Pre-test of Control Class

Class Interval	Bk	Z_i	$P(Z_i)$	Wide Area	E_i	O_i	$\frac{(O_i - E_i)^2}{E_i}$
40,00 - 47,00	39,50	-2,64	0,4958	0,0303	1,092	2	0,754
48,00 - 55,00	47,50	-1,82	0,4655	0,1242	4,470	4	0,049
56,00 - 63,00	55,50	-1,00	0,3413	0,2692	9,691	6	1,405
64,00 - 71,00	63,50	-0,18	0,0721	0,3098	11,154	14	0,726
72,00 - 79,00	71,50	0,64	0,2377	0,1894	6,817	8	0,205
80,00 - 87,00	79,50	1,45	0,4271	0,0614	2,210	2	0,020
	87,50	2,27	0,4885			36	
						X^2	3,160

With α = 5% and dk = 6-3=3, from the chi-square distribution table, obtained X_{table} = 7,815. Because

$X^2{}_{count}$ is lower than $X^2{}_{table}$ (3,160<7,815). So, the distribution list was normal.

c. Homogenity of the Initial Data in the Experimental and Control class

Homogeneity test is used to find out the group in this research is homogenous. The formula was used:

$$\boxed{F = \frac{Vb}{VK}}$$

Hypothesis:

$$H_o : \sigma_1^2 = \sigma_2^2$$
$$H_A : \sigma_1^2 \neq \sigma_2^2$$

Ho is accepted if $F \leq F_{1/2a\,(nb-1):(nk-1)}$

Table 4.6

Homogenity Test of Pre Test of Experimental and Control Class

Variance Sources	Experimental	Control
Sum	2230	2350
N	35	36
X	63,71	65,28
Variance (s^2)	93,1513	95,6349
Standart of deviation (s)	9,65	9,78

$$F = \frac{95,63}{93,15} = 1,0267$$

With α = 5% and df = (35-1 = 34): (36-1 = 35), it is obtained F_{table} = 1.97. Because F_{count} was lower than F_{table}

(1,0267>1,97). So, Ho was accepted and the two groups had the same variant / there was **homogeneous.**

d. Average Similarity of the Initial Data Between Experimental and Control Class

To test the average similarity, data is analyzed using t-test formula:

$$t = \frac{\overline{x_1} - \overline{x_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \quad \text{and} \quad S = \sqrt{\frac{(n_1 - 1)S_1^{\ 2} + (n_2 - 1)S_2^{\ 2}}{n_1 + n_2 - 2}}$$

Hypothesis:

H_o: $\mu_1 = \mu_2$

H_a: $\mu_1 \neq \mu_2$

Description:

μ_1: average of experimental class

μ_2: average of control class

Ho is accepted if $t > t_{(1-\square)(n1+n2-2)}$

Table 4.7

The Average Similarity Test of Pre Test of Experimental and Control Class

Variance Sources	Experimental	Control
Sum	2230	2350
N	35	36
X	63,71	65,28
Variance (s^2)	93,1513	95,6349
Standart of deviation (s)	9,65	9,78

$$S = \sqrt{\frac{(n_1 - 1)S_1^{\ 2} + (n_2 - 1)S_2^{\ 2}}{n_1 + n_2 - 2}}$$

$$S = \sqrt{\frac{(35-1)93{,}15 + (36-1)95{,}63}{35+36-2}} = \sqrt{\frac{10600442.05}{69}} = 9{,}71654$$

So, the computation t-test:

$$t = \frac{\overline{x_1} - \overline{x_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} = \frac{63{,}71 - 65{,}28}{9{,}71654\sqrt{\frac{1}{35} + \frac{1}{36}}} = -0{,}678$$

With α = 5% and dk = 35 + 36 – 2 = 59, obtained t_{table} =1.67. Because t_{count} was lower than t_{table} (-0,678<1.67). So, Ho was accepted and there was no difference of the pre test average value from both groups.

3. Phase End Analysis

It was done to answer hypothesis of this research. The phase end analysis contains of normality, homogenity and the average difference test of post test

a. The Data Analysis of the Experimental Class and the Control Class Post-test Score

Table 4.8

The list of the Experimental and Control Class Post test score

Experimental			Control		
No	**Code**	**Score**	**No**	**Code**	**Score**
1	E-01	100,00	1	C-01	75,00
2	E-02	90,00	2	C-02	70,00
3	E-03	90,00	3	C-03	95,00
4	E-04	95,00	4	C-04	80,00
5	E-05	80,00	5	C-05	80,00
6	E-06	85,00	6	C-06	85,00
7	E-07	95,00	7	C-07	75,00
8	E-08	90,00	8	C-08	80,00
9	E-09	95,00	9	C-09	85,00
10	E-10	95,00	10	C-10	85,00
11	E-11	70,00	11	C-11	90,00
12	E-12	90,00	12	C-12	80,00
13	E-13	90,00	13	C-13	75,00
14	E-14	90,00	14	C-14	75,00
15	E-15	80,00	15	C-15	90,00
16	E-16	80,00	16	C-16	75,00
17	E-17	90,00	17	C-17	85,00
18	E-18	90,00	18	C-18	85,00
19	E-19	85,00	19	C-19	80,00
20	E-20	75,00	20	C-20	70,00
21	E-21	90,00	21	C-21	65,00
22	E-22	75,00	22	C-22	75,00
23	E-23	90,00	23	C-23	85,00
24	E-24	75,00	24	C-24	85,00
25	E-25	95,00	25	C-25	90,00
26	E-26	90,00	26	C-26	85,00
27	E-27	65,00	27	C-27	75,00
28	E-28	85,00	28	C-28	85,00
29	E-29	85,00	29	C-29	80,00
30	E-30	85,00	30	C-30	90,00

31	E-31	80,00	31	C-31	70,00
32	E-32	80,00	32	C-32	65,00
33	E-33	75,00	33	C-33	70,00
34	E-34	85,00	34	C-34	90,00
35	E-35	80,00	35	C-35	85,00
			36	C-36	85,00
$\sum$		2990,00	$\sum$		2895,00
n_1		35	n_2		36
x_1		85,43	x_2		80,42
s_1^2		63,7815	s_2^2		57,6786
s_1		7,986	s_2		7,595

b. Normality of Post Test in Experimental and Control Class

1) Normality of Post Test in Experimental Class

The normality test was used to know whether the data obtained was normally distributed or not. Test data of this research used the formula of chi-square.The formula was used:

$$X^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i}$$

Hypothesis:

Ho: The distribution list is normal.

Ha: The distribution list is not normal

The computation of normality test:

Maximumscore = 100,00

N = 35

Minimum score = 65,00

Range = 35,00

K / Number of class = 6

Length of the class = 5,8

$\sum x$ = 100,50

$\bar{x}$ = 85,4

S = 8,0

Table 4.9

Normality Test of Post-test of Experimental Class

Class Interval	Bk	Z_i	$P(Z_i)$	Wide Area	E_i	O_i	$\frac{(O_i - E_i)^2}{E_i}$
65,00 - 70,00	64,50	-2,62	0,4956	0,0264	0,924	2	1,253
71,00 - 76,00	70,50	-1,87	0,4692	0,1010	3,535	4	0,061
77,00 ̃ 82,00	76,50	-1,12	0,3682	0,2251	7,880	6	0,448
83,00 - 88,00	82,50	-0,37	0,1431	0,2928	10,248	6	1,761
89,00 - 94,00	88,50	0,38	0,1497	0,2223	7,779	11	1,333
95,00 - 100,00	94,50	1,14	0,3720	0,0984	3,445	6	1,894
	100,5	1,89	0,4704			35	
						X^2	6,751

With α = 5% and df = 6-3=3, from the chi-square distribution table, obtained X_{table} = 7,815. Because X^2_{count} is lower than X^2_{table} (6,751<7,815). So, the distribution list was normal.

2) Normality of Post Test in Control Class

Maximum score = 95,00

N = 36

Minimum score	= 65,00
Range	= 30,00
K / Number of class	= 6
Length of the class	= 5,00
$\sum x$	= 95,50
$\bar{x}$	= 80,4
S	= 7,6

Table 4.10

Normality Test of Post-test of Control Class

Class Interval	Bk	Z_i	$P(Z_i)$	Wide Area	E_i	O_i	$\frac{(O_i - E_i)^2}{E_i}$
65,00 - 69,00	64,50	-2,10	0,4819	0,0572	2,061	2	0,002
70,00 - 74,00	69,50	-1,44	0,4247	0,1427	5,136	4	0,251
75,00 ̃ 79,00	74,50	-0,78	0,2820	0,2340	8,424	7	0,241
80,00 - 84,00	79,50	-0,12	0,0480	0,2526	9,095	6	1,053
85,00 - 89,00	84,50	0,54	0,2046	0,1796	6,464	11	3,183
90,00 - 95,00	89,50	1,20	0,3842	0,0923	3,324	6	2,155
	95,50	1,99	0,4765			36	
						X^2	6,884

With α = 5% and dk = 6-3=3, from the chi-square distribution table, obtained X_{table} = 7,815. Because $X^2{}_{count}$ is lower than $X^2{}_{table}$ (6,884<7,815). So, the distribution list was normal.

c. Homogenity of the Post Test in the Experimental and Control class

Homogeneity test was used to find out the group in this research is homogenous. The formula was used:

$$\boxed{F = \frac{Vb}{VK}}$$

Hypothesis:

$$H_o : \sigma_1^2 = \sigma_2^2$$

$$H_A : \sigma_1^2 \neq \sigma_2^2$$

Ho is accepted if $F \leq F_{1/2a\ (nb-1):(nk-1)}$

Table 4.11
Homogenity Test of Pre Test of Experimental and Control Class

Variance Sources	Experimental	Control
Sum	2990	2895
N	35	36
X	85,43	80,42
Variance (s^2)	63,7815	57,6786
Standart of deviation (s)	7,99	7,59

$$F = \frac{63,78}{57,68} = 1,1058$$

With α = 5% and df = (35-1 = 34): (36-1 = 35), it is obtained F_{table} = 1.97. Because F_{count} was lower than F_{table}

(1,1058 < 1,97). So, Ho was accepted and the two groups had the same variant / there was **homogeneous.**

d. Average Similarity of Post TestBetween Experimental and Control Class

To test the average similarity, data is analyzed using t-test formula:

$$t = \frac{\overline{x_1} - \overline{x_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \quad \text{and} \quad S = \sqrt{\frac{(n_1 - 1)S_1^{\ 2} + (n_2 - 1)S_2^{\ 2}}{n_1 + n_2 - 2}}$$

Hypothesis:

H_o: $\mu_1 = \mu_2$

H_a: $\mu_1 \neq \mu_2$

Description:

μ_1: average of experimental class

μ_2: average of control class

Ho is accepted if $t > t_{(1-\square)(n1+n2-2)}$

Variance Sources	Experimental	Control
Sum	2990	2895
N	35	36
X	85,43	80,42
Variance (s^2)	63,7815	57,6786
Standart of deviation (s)	7,99	7,59

$$S = \sqrt{\frac{(n_1 - 1)S_1^{\ 2} + (n_2 - 1)S_2^{\ 2}}{n_1 + n_2 - 2}}$$

$$S = \sqrt{\frac{(35-1)63{,}7815+(36-1)57{,}6786}{35+36-2}} = \sqrt{\frac{4187{,}322}{69}} = 7{,}79011$$

So, the computation t-test:

$$t = \frac{\overline{x_1}-\overline{x_2}}{S\sqrt{\frac{1}{n_1}+\frac{1}{n_2}}} = \frac{85{,}43-80{,}42}{7{,}79011\sqrt{\frac{1}{35}+\frac{1}{36}}} = 2{,}710$$

With α = 5% and dk = 35 + 36 – 2 = 59, obtained t_{table} =1.67. Because t_{count} was higher than t_{table} (2,710 > 1.67). Ho was rejected and ha was accepted. So, there was a significant difference of the post test average value from both groups.

C. Discussion of the Research Findings

The result of the research shows that the experimental class (the students who are taught using the little mermaid film as a medium) has the mean value 85,43. Meanwhile, the control class (the students who are taught using non-film) has the mean value80,42. It can be said that the achievement score of experimental class was higher than control class.

Based on the result above, it can be concluded that the little mermaid was an effective medium to teach simple past tense at eighth grade students of SMPN 23 Semarang in the academic year of 2012/2013. It can be seen from the result of anaysis by using t test formula:

1. The achievement of experimental group is lower than control group before treatment. It can be seen from the mean of pre test of experimental group (63.71) and the mean of control group (65.28) before treatment.
2. The achevement of experimental group after treatment is better than experimental group before treatment. It can be seen from the mean of post test of experimental group (85.43) is higher than the mean of experimental group (63.71) before treatment.
3. The achevement of control group before treatment is lower than control group after treatment. It can be seen from the mean of pre test of control group (65.28) is higher than the mean of control group (80.42) after treatment.
4. The achievement of experimental group after treatment is higher than control group after treatment. It can be seen at the mean of post test of experimental group (85.43) is higher than the mean of post test of control group (80.42) after treatment.
5. The improvement on control group is not as much on experimental group. It is convinced by statistical result of the hypothesis test. T-test formula showed that α = 5% and df = 35 + 36 – 2 = 69, obtained t_{table} =1.67 and t_{count} = 2,710. So, t_{count} was higher than t_{table} (2,710 > 1.67). It means that the little mermaid was an effective medium to facilitate students' understanding on simple past tense.

Based on the discussion of the research finding above, it can be concluded that using little mermaid was an effective medium to facilitate students' understanding on simple past tense. It can be seen from the mean of both experimental and control group.

There were many factors that influenced the result of study. One of the factors was teaching aids or media used in teaching. If a teacher employs an appropriate teaching aids or media that is suitable with the method, the students will enjoy the lesson. Based on the result of tests that had been done, it can be explained that using the little mermaid film as a medium in the process of learning English at VIII F and VIII H students of SMP N 23 Semarang could facilitate students' understanding on learning simple past tense.

There were some reasons why the students can improve their ability on learning simple past tense using the little mermaid film. They were as follow:

1. The use of film was actually meant to help them catch and express their ideas easily.
2. Students' boredom in learning grammar could be minimized. The treatment gave students different nuances in the teaching and learning process, so they were interested in the lesson. film that contained motion picture could attract students' attention and increase their interest to learn grammar, especially simple past tense.

In addition, learning using film also provided new variation. So that, students can enrich their vocabulary by imagining the words said by the actors.

In the process of learning, teacher should be resourceful in determining the classroom setting in order to make students focus in lesson. For example, by the setting of the class that is tailored to the learning activities of students of experimental class, the students wasmore focus and the atmosphere of the class was not too rowdy. By using appropriate teaching aids, students find it easier to understand the material that is delivered by the teacher. A fun learning can stimulate the spirit of the students to be active.

Meanwhile, teaching learning process in the control class is implemented through lecturing using text. In this process, the teacher explains the material using text. At the beginning of the process, the students are given a pre-test to know the initial ability of the students. Then, the students sit and pay attention to the teacher's explanation. However, students feel saturated with the material presented by the teacher because there is no interesting teaching aids or media used.

The ability of the students can be seen from the score of learning. Based on the research that had been done, it proves the average of students' achievement that find learning using film as a medium higher that is 85,43 compared with the average of the students who did not get learning using film as a medium that is 80,42. The use of film as a medium in teaching simple past tense has brought students to realize the minimum standard of score. T-test shows that t_{count}has positive score. It means that the average score of students who had been taught using film as a medium is higher than the score of students who had been taught using conventional learning.

Thus, it can be concluded that learning using the Little Mermaid film as a medium can facilitate students' understanding on simple past tenseat class VIII Fand VIII G students of SMP N 23 Semarang.

D. Limitations of the Research

The researcher realizes that this research had not been done optimally. There were constraints and obstacles faced during the research process. Some limitatitions of this research were:

1. Relative short time of research makes this research could not be done maximum.
2. The research was limited at SMPN 23 Semarang in the academic year of 2012/ 2013. So that when the same research will be gone in other schools, it was still possible to get different result.
3. The research is limited to find out the effectiveness of using the Little Mermaid film to teach simple past tense.

Considering all those limitations, there was a need to do more research about teaching simple past tense using the Little Mermaid film, so that the optimal result will be gained.