

## **CHAPTER IV**

### **RESEARCH FINDING AND DISCUSSION**

This chapter is aimed to find out whether any difference between the use English movie to improve student's vocabulary mastery at tenth grade of MA Miftahul Huda Tigaraksa, Tangerang. This chapter presents the research of finding which is intended to answer the problem of the study and research discussion. This chapter analyzes statistically the data gained from the result of pre-test and post-test of both experimental and control class.

#### **A. Data Presentation**

In this chapter the writer would like to present the description of data obtained. The writer explained in the previous chapter that the population in this research were all students of tenth grade in MA Miftahul Huda Tigaraksa Tangerang and the sample were 30 students of X mipa 1 as experimental class and 30 students of X mipa 2 as control class. In this research, the writer did an analysis 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. Pre-test was given before treatment and post-test was given after treatment. On the test, students choose the correct answer from multiple choice that consists 20 items.

The writer identifies some result to find out the effect of watching english movie to improve student's vocabulary mastery. They are the score of students before treatment, the score students after treatment and the differences between pre-test and post-test score of students. The writer describes the data in experimental and control class as below:

### **1. Data Result of Pre-Test and Post-Test of Experimental Class**

The writer analysis the data by comparing students' score in pre-test and post-test in the experimental class. The students' improvement score caused the writer used english movie in teaching vocabulary. If seen from the students' improvement score, it means that used English movie was success in improving student's vocabulary. The writer describes the students'

improvement score of pre-test and post-test at the experimental class by the table below:

**Table 4.1**

***The difference score between pre-test and post-test result of experimental class***

<b>No</b>	<b>Responden t</b>	<b>Pre-Test (<math>X_1</math>)</b>	<b>Post- Test (<math>X_2</math>)</b>	<b>Differences (<math>X_2 - X_1</math>)</b>
<b>1</b>	<b>AS</b>	<b>55</b>	<b>60</b>	<b>15</b>
<b>2</b>	<b>EAM</b>	<b>70</b>	<b>80</b>	<b>10</b>
<b>3</b>	<b>HN</b>	<b>40</b>	<b>60</b>	<b>20</b>
<b>4</b>	<b>KK</b>	<b>50</b>	<b>75</b>	<b>25</b>
<b>5</b>	<b>LI</b>	<b>55</b>	<b>60</b>	<b>5</b>
<b>6</b>	<b>LPM</b>	<b>70</b>	<b>90</b>	<b>20</b>
<b>7</b>	<b>MN</b>	<b>65</b>	<b>75</b>	<b>10</b>
<b>8</b>	<b>MA</b>	<b>75</b>	<b>95</b>	<b>20</b>
<b>9</b>	<b>NEY</b>	<b>60</b>	<b>65</b>	<b>5</b>
<b>10</b>	<b>NE</b>	<b>45</b>	<b>60</b>	<b>15</b>

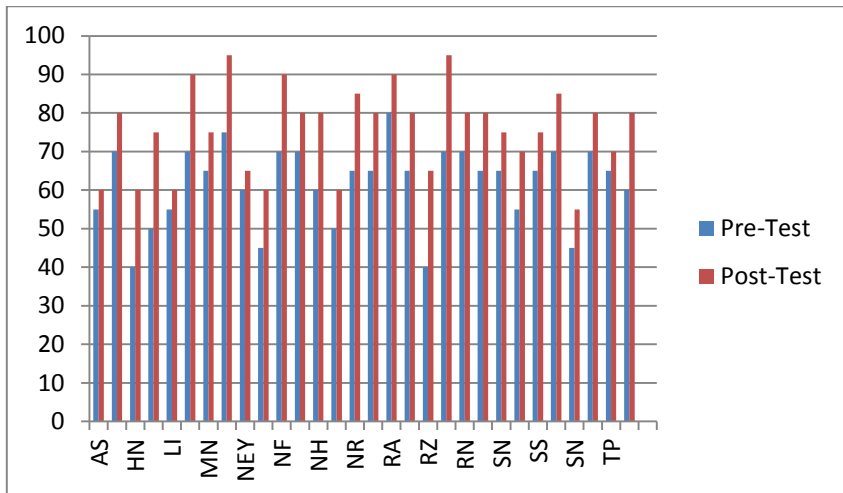
<b>11</b>	<b>NF</b>	<b>70</b>	<b>90</b>	<b>20</b>
<b>12</b>	<b>NFT</b>	<b>70</b>	<b>80</b>	<b>10</b>
<b>13</b>	<b>NH</b>	<b>60</b>	<b>80</b>	<b>20</b>
<b>14</b>	<b>NL</b>	<b>50</b>	<b>60</b>	<b>10</b>
<b>15</b>	<b>NR</b>	<b>65</b>	<b>85</b>	<b>20</b>
<b>16</b>	<b>OM</b>	<b>65</b>	<b>80</b>	<b>15</b>
<b>17</b>	<b>RA</b>	<b>80</b>	<b>90</b>	<b>10</b>
<b>18</b>	<b>RQ</b>	<b>65</b>	<b>80</b>	<b>15</b>
<b>19</b>	<b>RZ</b>	<b>40</b>	<b>65</b>	<b>25</b>
<b>20</b>	<b>RFP</b>	<b>70</b>	<b>95</b>	<b>25</b>
<b>21</b>	<b>RN</b>	<b>70</b>	<b>80</b>	<b>10</b>
<b>22</b>	<b>SA</b>	<b>65</b>	<b>80</b>	<b>15</b>
<b>23</b>	<b>SN</b>	<b>65</b>	<b>75</b>	<b>10</b>
<b>24</b>	<b>SMN</b>	<b>55</b>	<b>70</b>	<b>15</b>
<b>25</b>	<b>SS</b>	<b>65</b>	<b>75</b>	<b>10</b>
<b>26</b>	<b>SM</b>	<b>70</b>	<b>85</b>	<b>15</b>
<b>27</b>	<b>SN</b>	<b>45</b>	<b>55</b>	<b>10</b>
<b>28</b>	<b>SNK</b>	<b>70</b>	<b>80</b>	<b>10</b>

<b>29</b>	<b>TP</b>	<b>65</b>	<b>70</b>	<b>15</b>
<b>30</b>	<b>WFF</b>	<b>60</b>	<b>80</b>	<b>20</b>
<b>N</b> <b>=</b> <b>30</b>	<b>TOTAL</b>	$\Sigma X =$ <b>1850</b>	$\Sigma X =$ <b>2275</b>	$\Sigma X = 445$
	<b>AVERAG</b> <b>E</b>	<b>M = 61,66</b>	<b>M =</b> <b>75,83</b>	<b>M = 14.83</b>

Based the table 4.1 showed the difference result of pre-test and post-test at the experimental class. The mean (average score) of Pre-test was 61,66. The mean (average score) of post-test in experimental class was 75,83. There was significant difference score between pre-test and post-test at the experimental class by the highest score was 95 and the lowest was 60. It got the significant improvement after giving treatment using English movie method, it was seen from the average of the post-test better than pre-test  $61,66 < 75,83$ . The graphic describes the table as follow:

**Graphic 4.1**

***The different score between pre-test and post-test of  
experimental class***



From graphic 4.1 above showed the results of the students' pre-test and post-test scores on the criteria in vocabulary mastery at the experimental class. Data showed that the maximum score in pre-test was 80 and the minimum score was 40. While in post-test the maximum score was 95 and the minimum score was 60.

### 1. Data Description of Control Class

The writer analysis the data by comparing students' score in pre-test and post-test at the control class. This result describes by the table below:

**Table 4.2**

***The difference score between Pre-test and Post-test result of control class***

<b>NO</b>	<b>Respondent</b>	<b>Pre-Test</b> ( $X_1$ )	<b>Post-Test</b> ( $X_2$ )	<b>Difference</b> ( $X_2 - X_1$ )
<b>1</b>	<b>AF</b>	<b>75</b>	<b>85</b>	<b>10</b>
<b>2</b>	<b>AZZ</b>	<b>40</b>	<b>65</b>	<b>25</b>
<b>3</b>	<b>AN</b>	<b>60</b>	<b>75</b>	<b>15</b>
<b>4</b>	<b>BG</b>	<b>35</b>	<b>45</b>	<b>10</b>
<b>5</b>	<b>BL</b>	<b>30</b>	<b>40</b>	<b>10</b>
<b>6</b>	<b>DA</b>	<b>35</b>	<b>40</b>	<b>5</b>
<b>7</b>	<b>DN</b>	<b>25</b>	<b>40</b>	<b>15</b>
<b>8</b>	<b>EP</b>	<b>40</b>	<b>55</b>	<b>15</b>
<b>9</b>	<b>EM</b>	<b>35</b>	<b>50</b>	<b>15</b>

<b>10</b>	<b>FA</b>	<b>25</b>	<b>35</b>	<b>10</b>
<b>11</b>	<b>HDP</b>	<b>50</b>	<b>70</b>	<b>20</b>
<b>12</b>	<b>IN</b>	<b>35</b>	<b>40</b>	<b>5</b>
<b>13</b>	<b>HF</b>	<b>25</b>	<b>30</b>	<b>5</b>
<b>14</b>	<b>IR</b>	<b>50</b>	<b>70</b>	<b>20</b>
<b>15</b>	<b>IST</b>	<b>50</b>	<b>75</b>	<b>25</b>
<b>16</b>	<b>JW</b>	<b>55</b>	<b>60</b>	<b>5</b>
<b>17</b>	<b>MR</b>	<b>55</b>	<b>70</b>	<b>15</b>
<b>18</b>	<b>PA</b>	<b>45</b>	<b>55</b>	<b>10</b>
<b>19</b>	<b>RH</b>	<b>55</b>	<b>70</b>	<b>15</b>
<b>20</b>	<b>RK</b>	<b>60</b>	<b>80</b>	<b>20</b>
<b>21</b>	<b>SM</b>	<b>65</b>	<b>80</b>	<b>15</b>
<b>22</b>	<b>SR</b>	<b>65</b>	<b>75</b>	<b>10</b>
<b>23</b>	<b>SH</b>	<b>65</b>	<b>75</b>	<b>10</b>
<b>24</b>	<b>SENS</b>	<b>70</b>	<b>85</b>	<b>15</b>
<b>25</b>	<b>SP</b>	<b>70</b>	<b>85</b>	<b>15</b>
<b>26</b>	<b>TA</b>	<b>65</b>	<b>75</b>	<b>10</b>
<b>27</b>	<b>UT</b>	<b>40</b>	<b>55</b>	<b>15</b>

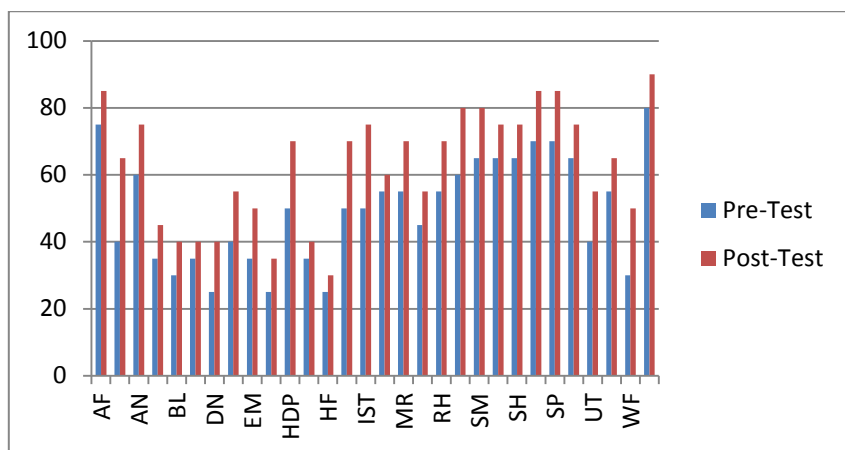


<b>28</b>	<b>VH</b>	<b>55</b>	<b>65</b>	<b>10</b>
<b>29</b>	<b>WF</b>	<b>30</b>	<b>50</b>	<b>20</b>
<b>30</b>	<b>YY</b>	<b>80</b>	<b>90</b>	<b>10</b>
<b>N = 30</b>	<b>TOTAL</b>	$\Sigma X =$ <b>1485</b>	$\Sigma X =$ <b>1885</b>	$\Sigma X =$ <b>390</b>
	<b>AVERAGE</b>	<b>M = 49,5</b>	<b>M = 62,83</b>	<b>M = 13</b>

Table 4.8 above showed that the difference score between pre-test and post-test at the control class. The mean (average score) of Pre-test was 49,5. The mean (average score) of Post-test was 62,83. There was significant difference score between pre-test and post-test at the control class by the highest score was 90 and the lowest was 30. It showed the difference result of pre-test and post-test at the control class got the significant improvement after giving treatment without using English movie it was seen from the average of the post-test better than pre-test  $49,6 < 62,83$ . The graphic describes the table as follow:

**Graphic 4.2**

*The different score between pre-test and post-test of control class*



From graphic 4.2 above showed the results of the students' pre-test and post-test scores on the criteria in reading at the control class. Data showed that the maximum score in pre-test was 80 and the minimum score was 25. While in post-test the maximum score was 90 and the minimum score was 30.

## **B. Analysis of Data**

### **1.T-test Calculation**

The writer analyzed the data by using t-test. The formula as follow:

$$t_0 = \frac{M_1 - M_2}{\left( \frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2} \right) \left( \frac{N_1 + N_2}{N_1 \cdot N_2} \right)}$$

Notes:

$t_0$  = t observation

$M_1$  = Mean score of the experiment class

$M_2$  = Mean score of the control class

$\sum x_1^2$  = Sum of square deviation score in experiment class

$\sum x_2^2$  = Sum of square deviation score in control class

$N_1$  = Number of students of experiment class

$N_2$  = Number of students of control class

2 = Constant number

df = Degree of Freedom (df =  $N_1 + N_2 - 2$ )

**Table 4.7**

***The result calculation of post-test at the experimental class***

***( $X_1^2$ ) and the control class ( $X_2^2$ )***

NO	$X_1$	$X_2$	$x_1$	$x_2$	$x_1^2$	$x_2^2$
1	60	85	- 15.83	22.17	250.5889	491.5089
2	80	65	4.17	2.17	17.3889	4.7089
3	60	75	- 15.83	12.17	250.5889	148.1089

4	75	45	-0.83	- 17.83	0.6889	317.9089
5	60	40	- 15.83	- 22.83	250.5889	521.2089
6	90	40	14.17	- 22.83	200.7889	521.2089
7	75	40	-0.83	- 22.83	0.6889	521.2089
8	95	55	19.17	-7.83	367.4889	61.3089
9	65	50	- 10.83	- 12.83	117.2889	164.6089
10	60	35	- 15.83	- 27.83	250.5889	774.5089
11	90	70	14.17	7.17	200.7889	51.4089
12	80	40	4.17	- 22.83	17.3889	521.2089
13	80	30	4.17	- 32.83	17.3889	1077.809
14	60	70	- 15.83	7.17	250.5889	51.4089
15	85	75	9.17	12.17	84.0889	148.1089
16	80	60	4.17	-2.83	17.3889	8.0089
17	90	70	14.17	7.17	200.7889	51.4089
18	80	55	4.17	-7.83	17.3889	61.3089
19	65	70	- 10.83	7.17	117.2889	51.4089
20	95	80	19.17	17.17	367.4889	294.8089
21	80	80	4.17	17.17	17.3889	294.8089
22	80	75	4.17	12.17	17.3889	148.1089
23	75	75	-0.83	12.17	0.6889	148.1089
24	70	85	-5.83	22.17	33.9889	491.5089
25	75	85	-0.83	22.17	0.6889	491.5089

26	85	75	9.17	12.17	84.0889	148.1089
27	55	55	- 20.83	-7.83	433.8889	61.3089
28	80	65	4.17	-2.17	17.3889	4.7089
29	70	50	-5.83	- 12.83	33.9889	164.6089
30	80	90	4.17	27.17	17.3889	738.2089
$\Sigma$	2275	188 5			3654.167	8534.167

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  $x_2$

Based on the table above, the researcher got the data  $\Sigma X_1 = 2275$ ,  $\Sigma X_2 = 1885$ ,  $\Sigma x_1^2 = 3654.167$ ,  $\Sigma x_2^2 = 8534.167$  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  $X_2$

$$\text{Variable } X_1 \quad M_1 = \frac{\sum x_1}{N_1} = \frac{2275}{30} = 75.83$$

$$\text{Variable } X_2 \quad M_2 = \frac{\sum x_2}{N_2} = \frac{1885}{30} = 62.83$$

2. Determine t-test

$$\sum x_1^2 = \mathbf{3654.167}$$

$$\sum x_2^2 = \mathbf{8534.167}$$

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

$$\begin{aligned} t_o &= \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}} \\ &= \frac{75,83 - 62.83}{\sqrt{\left(\frac{3654.167 + 8534.167}{30 + 30 - 2}\right) \left(\frac{30 + 30}{30 \cdot 30}\right)}} \\ &= \frac{13}{\sqrt{\left(\frac{12188.334}{58}\right) \left(\frac{60}{900}\right)}} \\ &= \frac{13}{\sqrt{210.143 \times 0,06}} \\ &= \frac{13}{\sqrt{12.608}} \\ &= \frac{13}{3.55} \end{aligned}$$

$$= 3,66$$

So after the writer calculates this data based on the formula t-test, the obtained  $t_o$  or  $t_{observation}$  was 3,66.

### C. Hypothesis Testing

Based on the result of calculation above, it is obtained that the value of  $t_o$  ( $t_{observation}$ ) was 3,66, the degree of freedom (df) = 58. In the degree significance 5% = 1,67 in degree of significance 1% = 2,39 . After that the writer compared the data with  $t_t$  (t table) both in degree significance 5% and 1%. Therefore  $t_o:t_t = 3,66 > 1,67$  in degree of significance 5% and  $t_o:t_t = 3,66 > 2,39$  in degree significance 1%. (Ha) English movie has significant effect in improving student's vocabulary mastery, (Ho) english movie has not significant effect in improving student's vocabulary mastery.

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 there was significant effect of using English movie.

#### **D. Interpretation Data**

The data showed that the mean of pre-test score obtained by students of experimental class = 61,66 and pre-test scores obtained by students of control class = 49,5. The highest score of two classes was different, the experimental class got 80 and the control class got 80 . The lowest score of pre-test of both classes was 40 for the experimental class and also 25 for the control class.

The mean of post-test score obtained by students of experimental class = 75,83 and post-test scores obtained by students of control class = 62,83. The highest score of two classes was different, the experimental class got 95 and the control class got 90. The lowest score of pre-test of both classes was 40 for the experimental class and also 25 for the control class. To improve it, the data obtained from the experimental class and control class are calculated with assumption as follow:



- 1) If the calculation's result of  $t$  observation is bigger than  $t$  table ( $t_o > t_t$ ), so the alternative hypotheses ( $H_a$ ) is accepted and the null hypotheses ( $H_o$ ) is rejected.
- 2) If the calculation's result of  $t$  observation is smaller than  $t$  table ( $t_o < t_t$ ), so the alternative hypothesis ( $H_a$ ) is rejected and the null hypotheses is accepted.

According to the data,  $t_o$  was 3,66, at the degree significant 5% was 1,67 and at the degree of 1% was 2,39. The value of  $t_o$  ( $t$  observation) was bigger than  $t_t$  ( $t$  table)  $1,67 < 3,66 > 2,39$ . The alternative hypotheses ( $H_a$ ) was accepted and the null hypotheses ( $H_o$ ) is rejected. Based on the data analysis and discussion above, the researcher can interpret that using movie was effective to be used in teaching vocabulary. According to the result of the research, it is found that students who were taught by using English movie increased in their vocabulary mastery than students who were not taught by using English movie. The students of the experimental class gave the positive response to the application of the activity. They felt enjoyable and interesting

when they were learning vocabulary using English movie, they gave more attention to the movie which is about vocabulary and it makes them more understand and enthusiast to the lesson. From the researcher's view, the motivation of the students was good after they were given the treatment. It could be seen from the students' participation during the teaching learning process. They looked enjoyable and enthusiast in giving example from new vocabulary.