# CHAPTER IV

# RESULT AND DISCUSSION

## A. Description of Data

In this chapter, the researcher explains the result of this research. The research was conducted in SMAN 1 Ciomas by using quasi experimental research. The researcher only applied to the students of ten grade. In this research the researcher divided the sample into two classes, 30 students of X IPA3 as experimental class and 30 students of X IPA4 as control class. To explore students' reading skill by using online dictionary, the writer takes the data by using pre-test and post-test. Ant the result from both testes will be used as data in this research.

The researcher conduct the research about two weeks which consisted of pre-test at both of classes on 15$^{th}$ of April 2019, the first treatment at experiment and control class on 16$^{th}$ of April 2019, the second treatment at experiment and control class on 22$^{nd}$ of April 2019, and the post-test implemented on 23$^{rd}$ of April 2019.

The data of this research were the score of the students' pre-test and post-test both experimental class and control class. The score of pre-test was taken before treatment, while the score of post-test was taken after the treatment. The result of pre-test is to know students' reading comprehension before receiving the treatment, meanwhile the result of post-test is to give the information whether there is any improvement on students' reading comprehension on descriptive text after receiving the treatments.

The researcher got two data, the first data is the result of pre-test and the second one is the result of post-test. The result of post-test in experimental class is named variable (x) and the result of post-test in control class is named variable (y). The researcher measured students' reading comprehension achievement by using a test in multiple choice. Below are the data of pre-test and post-test in experimental and control class.

1. The score of pre-test and post-test of experiment class

The students' score of X IPA 3 as the experimental class get $\sum X_1 = 1330$ of pre-test and $\sum X_2 = 2234$ of post-test. The score of pre-test and post-test will be describe in the following table.

**Table 4.1**

**The score of Pre-test and Post-test of Experimental class**

| No | Respondents | SCORE | |
|---|---|---|---|
| | | Pre-test ($X_1$) | Post-Test ($X_2$) |
| 1 | AY | 45 | 70 |
| 2 | SO | 35 | 75 |
| 3 | SAS | 55 | 75 |
| 4 | AA | 35 | 70 |
| 5 | AR | 55 | 80 |
| 6 | AM | 45 | 75 |
| 7 | EA | 40 | 80 |
| 8 | LR | 35 | 70 |

| | | | |
|---|---|---|---|
| 9 | LA | 35 | 80 |
| 10 | AA | 35 | 80 |
| 11 | EM | 35 | 70 |
| 12 | AC | 35 | 75 |
| 13 | ADM | 30 | 70 |
| 14 | DM | 40 | 70 |
| 15 | RA | 60 | 75 |
| 16 | SSM | 20 | 60 |
| 17 | FS | 65 | 85 |
| 18 | AL | 75 | 90 |
| 19 | BS | 75 | 90 |
| 20 | AN | 40 | 70 |
| 21 | AA | 70 | 80 |
| 22 | SST | 65 | 70 |
| 23 | AHA | 30 | 70 |
| 24 | CT | 35 | 75 |
| 25 | NM | 50 | 70 |
| 26 | SW | 50 | 75 |

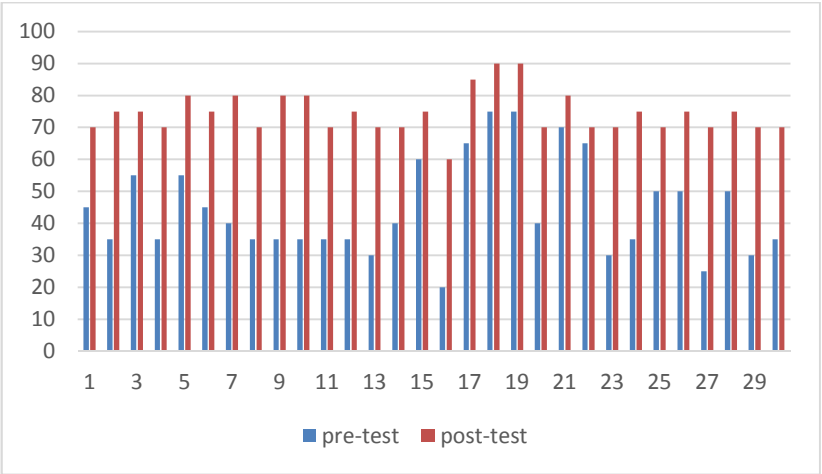
| | | | |
|---|---|---|---|
| 27 | MSA | 25 | 70 |
| 28 | SA | 50 | 75 |
| 29 | SMM | 30 | 70 |
| 30 | DA | 35 | 70 |
| | Total score | $\sum X_1 = 1330$ | $\sum X_2 = 2235$ |
| | | M= 44,33 | M= 74,5 |

The table 4.1 showed the result of the students' pre-test and post-test in experimental class. The data showed at pre-test the maximum score is 75 and the minimum score is 20. The students who got maximum score are two students and the student who got the minimum score is one student. The data showed at post-test the maximum score is 90 and the minimum score is 60. The student who got maximum score are 2 students and the student who got minimum score is one student.

The researcher described the students' score of pre-test and post-test of experimental class by the graphic as follow:

**Graphic 4.1**

**The score Pre-test and Post-test of Experimental Class**




The graphic above showed the comparison between score of pre-test and post-test at experimental class. Based on the graphic above, it can be seen the result of pre-test is lower than post-test, it means students' reading descriptive text is low. The score of post-test is better than

score of pre-test. It means there is significant effect in the score of pre-test and post-test.

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

The students' score of X IPA 4 as the control class get $\sum Y_1$= 1710 of pre-test and $\sum Y_2$= 1705 of post-test. The score of pre-test and post-test will be described in the following table:

**Table 4.2**

**The Score of Pre-test and Post-test of Control Class**

| No | Respondents | SCORE | |
|---|---|---|---|
| | | Pre-test ($Y_1$) | Post-test ($Y_2$) |
| 1 | PPS | 70 | 50 |
| 2 | DC | 60 | 60 |
| 3 | JD | 50 | 70 |
| 4 | PW | 50 | 70 |
| 5 | N | 60 | 55 |

| | | | |
|---|---|---|---|
| 6 | SM | 75 | 60 |
| 7 | FM | 65 | 60 |
| 8 | ZA | 70 | 70 |
| 9 | AF | 75 | 75 |
| 10 | BDC | 60 | 35 |
| 11 | RR | 40 | 60 |
| 12 | NR | 55 | 35 |
| 13 | ME | 55 | 40 |
| 14 | SL | 70 | 70 |
| 15 | AR | 55 | 60 |
| 16 | IR | 55 | 50 |
| 17 | NW | 55 | 50 |
| 18 | UK | 75 | 70 |
| 19 | UU | 40 | 40 |
| 20 | NH | 45 | 50 |
| 21 | NS | 40 | 60 |
| 22 | DLJ | 70 | 70 |
| 23 | KK | 55 | 60 |
| 24 | NR | 60 | 60 |

| | | | |
|---|---|---|---|
| 25 | DY | 60 | 50 |
| 26 | DA | 55 | 55 |
| 27 | RHJ | 65 | 70 |
| 28 | PD | 40 | 40 |
| 29 | FA | 30 | 50 |
| 30 | MH | 55 | 60 |
| Total Score | | $\sum Y_1 = 1710$ | $\sum Y_2 = 1705$ |
| | | M= 57,00 | M= 56,83 |

The table 4.2 showed the result of the students' pre-test and post-test in control class. The data showed at pre-test the maximum score is 75 and the minimum score is 30. The students who got maximum score are three students and the student who got the minimum score is one student. The data showed at post-test the maximum score is 75 and the minimum score is 35. The student who got maximum score is one student and the student who got minimum score is one student.

The researcher described the students' score of pre-test and post-test of control class by the graphic as follow:

**Graphic 4.2**

**The score pre-test and post-test of Control class**


The graphic above showed the comparison between score of pre-test and post-test at control class. Based on the graphic above, the students reading descriptive text is low it can be seen on the score of pre-test. And there is no different significant in the score of pre-test and post-test.

## B. Data Analysis

After getting the data from pre-test and post-test score of two classes. The researcher analyzed it by using

t-test formula with the degree of significant 5% and 1% the researcher used step as follows:

**Table 4.3**

| No | Score | | X | Y | Deviation | Deviation |
|---|---|---|---|---|---|---|
| | Post-test ($X_2$) | Post-test ($Y_2$) | ($X_2$-$M_x$) | ($Y_2$-$M_y$) | $\sum X^2$ | $\sum Y^2$ |
| 1 | 70 | 50 | -4,5 | -6,83 | 20,25 | 46,64 |
| 2 | 75 | 60 | 0,5 | 3,17 | 0,25 | 10,04 |
| 3 | 75 | 70 | 0,5 | 13,17 | 0,25 | 173,44 |
| 4 | 70 | 70 | -4,5 | 13,17 | 20,25 | 173,44 |
| 5 | 80 | 55 | 5,5 | -1,83 | 30,25 | 3,34 |
| 6 | 75 | 60 | 0,5 | 3,17 | 0,25 | 10,04 |
| 7 | 80 | 60 | 5,5 | 3,17 | 30,25 | 10,04 |
| 8 | 70 | 70 | -4,5 | 13,17 | 20,25 | 173,44 |
| 9 | 80 | 75 | 5,5 | 18,17 | 30,25 | 330,14 |
| 10 | 80 | 35 | 5,5 | 21,83 | 30,25 | 476,54 |
| 11 | 70 | 60 | -4,5 | 3,17 | 20,25 | 10,04 |
| 12 | 75 | 35 | 0,5 | - | 0,25 | 476,54 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | 21,83 | | |
| 13 | 70 | 40 | -4,5 | -16,83 | 20,25 | 283,24 |
| 14 | 70 | 70 | -4,5 | 13,17 | 20,25 | 173,44 |
| 15 | 75 | 60 | 0,5 | 3,17 | 0,25 | 10,04 |
| 16 | 60 | 50 | -14,5 | -6,83 | 210,25 | 46,64 |
| 17 | 85 | 50 | 10,5 | -6,83 | 110,25 | 46,64 |
| 18 | 90 | 70 | 15,5 | 13,17 | 240,25 | 173,44 |
| 19 | 90 | 40 | 15,5 | 16,83 | 240,25 | 283,24 |
| 20 | 70 | 50 | -4,5 | -6,83 | 20,25 | 46,64 |
| 21 | 80 | 60 | 5,5 | 3,17 | 30,25 | 10,04 |
| 22 | 70 | 70 | -4,5 | 13,17 | 20,25 | 173,44 |
| 23 | 70 | 60 | -4,5 | 3,17 | 20,25 | 173,44 |
| 24 | 75 | 60 | 0,5 | 3,17 | 0,25 | 173,44 |
| 25 | 70 | 50 | -4,5 | -6,83 | 20,25 | 46,64 |
| 26 | 75 | 55 | 0,5 | -1,83 | 0,25 | 3,34 |
| 27 | 70 | 70 | -4,5 | 13,17 | 20,25 | 173,44 |
| 28 | 75 | 40 | 0,5 | 16,83 | 0,25 | 283,24 |
| 29 | 70 | 50 | -4,5 | -6,83 | 20,25 | 46,64 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 30 | 70 | 60 | -4,5 | 3,17 | 20,25 | 173,44 |
| ∑ N | **2.235** | **1.705** | | | **1.217,5** | **4.214,1** |

Note:

$X_2$ = score of post-test (Experimental class)

$Y_2$ = score of post-test (Control class)

$X = X\text{-}M_x$ (Mean $X_2$)

$Y = Y\text{-}M_y$ (Mean $Y_2$)

$X^2$ = The squared Value of X2

$Y^2$ = The squared Value of Y2

From the table above, the researcher got the data $\sum X_2 = 2.235$, $\sum Y_2 = 1.702$, $\sum X^2 = 1.217,5$, and $\sum Y^2 = 4.214,1$. After getting the data from pre-test and post-test, the researcher analyzed it by using statistic calculation of t-test formula with degree of significance 5% and 1% the formula as follow:

1. Determining mean of variable X and Y

a. Variable $X_2$ (Experimental class)

Post-test

$$M_x = \frac{\sum x2}{n2}$$

$$= \frac{2235}{30}$$

$$= 74,5$$

b. Variable $Y_2$ (Control class)

Post-test

$$M_y = \frac{\sum y2}{n2}$$

$$= \frac{170,5}{30}$$

$$= 56,83$$

2. Determine t-test

$$t = \frac{mx - my}{\sqrt{\left\{\frac{\sum X2 + \sum Y2}{N1 + N2 - 2}\right\}\left\{\frac{N1 + N2}{N1.N2}\right\}}}$$

$$t = \frac{74,5 - 56,83}{\sqrt{\left\{\frac{1217,5 + 4214,4}{30 + 30 - 2}\right\}\left\{\frac{30 + 30}{30.30}\right\}}}$$

$$t = \frac{17,67}{\sqrt{\left\{\frac{5.432}{58}\right\}\left\{\frac{60}{900}\right\}}}$$

$$t = \frac{17,67}{\sqrt{\{93,65\}\{0,06\}}}$$

$$t = \frac{17,67}{\sqrt{5,619}}$$

$$t = \frac{17,67}{2,37}$$

$$= 7,45$$

From the result of the calculation above, it is obtained that the value of $t_o$ (t observation) is 7,45. After found the data, the researcher compare it with $t_t$ (t table) both in degree significant 5% and 1%.

3. Degree of Freedom

   df = $N_1+N_2-2$

   =30+30-2

   = 60-2

   = 58

**C. Hypothesis Testing (t-test)**

Data obtained from both pre-test and post-test are analyzed and concluded using t-test formula. The data obtained from the experimental class and the control class are calculated with the assumption as follow:

If $t_o < t_t$ : the alternative hypothesis ($H_a$) is rejected : the alternative hypothesis (Ha) is rejected and null hypothesis ($H_o$) is accepted. It means there is no significant effect of using online dictionary in teaching reading descriptive text.

If $t_o > t_t$: the alternative hypothesis (Ha) is accepted and null hypothesis ($H_o$) is rejected. It means there is significant effect of using online dictionary in teaching reading descriptive text.

Based on the assumption above, it is obtained that the value of $t_o$ is 7,45 and the degree of freedom (df) is 58. In degree of significant 5% from t table is 1,67 and in degree of significant 1% is 2,39.

After got the data, the researcher compared it with $t_t$ (t table) both in degree significant 5% and 1% by formula:

$t_t$ 5% < $t_o$ > $t_t$ 1% = 1,67 < 7,45 > 2,39

$t_o$ : $t_t$ = 7,45 > 1,67 in degree of significant 5%

$t_o$ : $t_t$ = 7,45 > 2,39 in degree of significant 1%

The statistic hypothesis states that if $t_o$ is higher than $t_t$, it shows $H_a$ (alternative hypothesis) of the result is accepted and $H_o$ (null hypothesis) is rejected. It means there is significant effect of using online dictionary toward students' reading descriptive text.

## D. Data Interpretation

The aim of the research is to find out the effectiveness of online dictionary in teaching reading descriptive text in SMAN 1 Ciomas.

After analyzing the pre-test and post-test from two classes, experimental class and control class, the researcher got the data of pre-test and post-test score. In the experimental class, the highest score in pre-test is 75 and the lowest score is 20. The highest score in post-test is 90 and the lowest score is 60. The mean of pre-test score obtained by students in this class is 44,33 and the mean of

post-test score is 74,5. The mean of pre-test and post-test score have good enough improvement it can be seen 74,5 > 44,33. The improvement caused by the experimental class learns reading descriptive text by using online dictionary after pre-test.

In the control class, the highest score in pre-test is 75 and the lowest score is 30. The highest score in post-test is 75 and the lowest score is 35. The mean of pre-test score obtained by students in this class is 57,00 and the mean of post-test score is 56,83. There is no good improvement of the result in this class. It caused in control class did not lean by using online dictionary.

Not only the score of the data, but also the researcher fond the different time between control class and experimental class. As long the researcher gave treatment for the classroom the researcher also made some notes for each classes. Based on the note that the researcher write, the researcher fond several differences in the control and experimental class, such as:

a. In the control class, the students finished the test for 90 minutes, even the researcher fond the students answers' not completed.
b. In the experimental class, the test finished in 70 minutes, so it means the experimental class is more understand.

So it could be concluded that online dictionary is effective to facilitate students' reading descriptive text in experimental group. It can be seen at the mean value of both groups. There is significant difference in students' reading descriptive text between experimental and control group.