## CHAPTER IV

## RESULT AND DISCUSSION

This study is to find out if there is any difference between the use of basic questioning with picture and traditional technique on students'ability in writing descriptive text at the eighthgrade of SMPN 2 Paciran - Lamongan. This chapter presents the finding of the research which is intended to answer the research. Moreover, this chapter presents the analysis of the data taken from the pre-test and post-test in both classes of experimental and control group.

## A. Data Presentation

This study used experimentaldesign which consisted ofan experimental group and a control group. As has been outlined in Chapter III, the VIII C as experimental group was taught by using basic questioning with picture, while the control was VIII F which was taught by traditional technique. Each of group consists of 30 students and were given pre-test and post-test.

In analyzing the data of pre-test and post-test, the statistical formula was applied to calculate the mean score of pre test and post test of both groups, the standard deviation and the mean difference. It was done in order to investigate
whether basic questioning with picture improves students writing ability in descriptive text after holding treatment in the experimental group.

## B. Results

Basic questioning with picture was used to improve the student writing ability in descriptive text. This study was conducted to find out whether there is a significant difference between the students who were taught by using basic questioning technique and those who were taught without using basic questioning technique. The data show the score is different from pretest and posttest of experimental groups and control groups.

## 1. The Result of the Experimental and Control Group

The aim of this part is to present result of the pretest and posttest scores of the experimental and the control group. Pretest in the experimental and control group was attended by 30 students in each group and so was the posttest. The pre test was given at the first meeting while the post test was conducted in the fourth meeting. After the test scores were collected, they were analyzed to inform the finding of the research.

There were several steps to analyze the data. First, the researcher put the score of the pretest and posttest of the experimental and the control groups in a table. Second, the researcher calculated the total score of pretest and the mean. The result of the experimental and the control groups were presented in the Table 4.1.

Table 4.1
Pre-test Score and Mean

| Group | student | Total score | Mean |
| :--- | :--- | :--- | :--- |
| Experimental groups | 30 | 1528 | 50.93 |
| Control groups | 30 | 1525 | 50.83 |

The above score can be described through the following chart.


## Chart 1

Pre test Score and Mean

The table shows that the sum of the pretest scores was 1528 for the experimental groups and 1525 for the control groups. The mean of the pretest scores of the experimental group was 50.93 and the control group was50.83. It
means that the students of the two groups have slight difference of ability in writing before the treatments were given.Many students could not achieve the minimum score (39). Here, the students faced some problems in writing descriptive text. They got difficulty to start writing because they did not have any idea and imagination. Some of them were poor in grammar and vocabulary and it made them got difficulties in arranging the sentences into good order.

After the pretest, the experimental group was given treatment in form of teaching English writing by using basic questioning with picture. The treatment was given by the English teacher. The same English teacher also taught in the control group. However, she did not use the technique as in the experimental group; she used the traditional technique she commonly applied before this research. After the treatments, the posttest was conducted to both groups.

The purpose of the posttest was to know whether there were improvements in the student's achievements on writing descriptive text in the experimental group who were taught by using basic questioning with picture. The result of the posttest score and mean of the experimental and control groups were presented in following table 4.2.

Table 4.2
Post-test Score and Mean

| Group | $\sum$ student | Total Score | Mean |
| :--- | :--- | :--- | :--- |
| Experimental group | 30 | 2141 | 71.37 |
| Control group | 30 | 1729 | 57.63 |

Chart of posttest score and means in the both of groups.


## Chart 2

## Post-test Score and Mean

From the result of pretest and posttest scores of experimental group, we could see that the posttest score was higher than the pretest. Overall the improvement between pretest and posttest score of the experimental group was higher than the control one.

Then the researcher calculated the two meant posttest scores by using t -test formula to know whether it was significant or not.

## C. Calculating the t -test

After the treatment, the researcher calculated the difference of pretest and posttest scores between both of classes experimental and control groups to know whether the result different was significant or not between both of groups. Then, the result was analyzed by using t -test formula. Before it was done, the standard deviation of the two groups was calculated first. This table 4.3.presents the result of the calculation of the standard deviation.

Table 4.3
The Result Calculation of Standard Deviation (SD).

| Group | $\sum$ student | Mean | SD |
| :--- | :--- | :--- | :--- |
| Experimental <br> Group | 30 | 71.37 | 6.048 |
| Control Group | 30 | 57.63 | 6.031 |

The data in the table above show that the standard deviation (SD) of the experimental group is 6.048 which is higher than that of the control group which
is 6.031. It means that there is difference of the posttest scores between experimental groups and control.

After knowing the mean of pre-test and post-test, then the researcher calculated the mean difference between pretest and posttest of both classes. The result of the calculation is presented in table 4.4 below.

## Table 4.4

## The Result of Mean Difference of Pretest Posttest

| Group | Number of <br> students | Pretest | Posttest | Mean difference |
| :--- | :--- | :--- | :--- | :--- |
| Experimental | 30 | 50.93 | 71.37 | 20.4 |
| Control | 30 | 50.83 | 57.63 | 6.8 |

The data above show that the mean difference of pretest-posttest of the experimental class is higher than that of the control class. The result of mean difference between pretest and posttest of the experimental class is 20.4 , while the result of mean difference of the control class is 6.8. It means that after given the treatment of using basic questioning with picture technique the students in the experimental group have higher score than the students in the control group who were taught by using traditional technique.

Then, to find if there is significant mean difference between both classes t-test formula was used:

$$
\begin{aligned}
t=\frac{\bar{x}_{1}-\bar{x}_{2}}{\sqrt{\frac{s_{1}^{2}}{N_{1}}+\frac{s_{2}^{2}}{N_{2}}}} & \\
& =\frac{71.37-57,63}{\sqrt{\frac{19.89}{30}+\frac{31.36}{30}}} \\
& =\frac{13.74}{\sqrt{0.66+1.04}} \\
& =\frac{13.17}{\sqrt{1.7}} \\
& =\frac{13.17}{1.30} \\
& =10.65
\end{aligned}
$$

The result of the calculation is presented in table 4.5 below.
Table 4.5
The result of $t$-test

| Subject | $\sum$ student | Deviation <br> square | t- value | t - table |
| :--- | :--- | :--- | :--- | :--- |
| Experimental <br> group | 30 | 19.89 | 10.65 | 2.042 |
| Control <br> group | 30 | 31.36 |  |  |

Then, to calculate the $t$-test the researcher determined the degrees of freedom first by using formula as bellow:

Degree of freedom:
N $1+\mathrm{N} 2-2$
$=30+30-2$
$=58$
From the presentation above, it could be seen that the deviation square of the experimental groups is 19.89 while that of the control group is 31.36 . Based on the calculation of $t$-test, the result of $t$-value is 10.65 . This value was then compared to $t$-table distributionwith the significant level of 0.05 (5\%) and degree of freedom58. The value in the $t$-table is 2,000 . So, it is clear that the $t$-value is far above the t-table ( 10.65 compared to 2,000 ). This indicates that there is significant difference in the achievement between the students who were taught by using basic questioning with picture in the experimental group and those who were taught by using traditional technique in the control group. In other words, the treatments by usingbasic questioning with picture have significant influence to the students' scores in writing.

## D. Hypothesis Testing

Hypothesis testing was done to know whether the null hypothesis has to be accepted or rejected. If $t_{\text {value }}<t$ table, it means that null hypothesis (Ho) is accepted and alternative hypothesis (Ha) is rejected. To test the hypothesis, the t-
test formula, degree of freedom and the standard of significance ( 0.05 or $5 \%$ ) were used. The last steps $t_{\text {value }}$ were compared to $t$ table. The result of $t{ }_{\text {value }} 10.65$ is higher than $t$-table with the level significance of $5 \%$ and degree of freedom 58. By looking at the calculation above which states $t_{\text {value }}$ is higher than $t$ table, then the conclusion is that the null hypothesis ( H 0 ) is rejected and the alternative hypothesis (Ha) is accepted. This means that the independent variable, the basic questioning technique with picture, significantly influences the dependent variable, the students' ability in writing.

The result shows that basic questioning with picture significantly has been able to demonstrate as a learning method. It can be concluded that the application of the technique of basic questioning with picture decisively improves the students' writing skill in class VIII. Therefore, Ha, basic questioning technique with picture is effective in teaching writing, is accepted and the null hypothesis (Ho), the group taught using basic questioning with picture will not get the better score than the group taught using traditional technique, is rejected.

## E. Discussion

This section discusses the research findings based on the theories related to the study. This research is about the effectiveness of teaching writing by using the quasi experimental method. The result of this research was calculated by using t-test. Basic questioning with picture technique was used as a new method
and compared to traditional methods. It used two classes as with Class VIII-C given basic questioning with picture technique and class VIII-E taught by using traditional methods. The two classes were taken as the sample based on the result of pretest that show that the two classes have similar mean scores, indicating similar ability in writing before the treatment.

The experimental study was conducted over four meetings. On the firstmeeting the pretest was conducted for both classes VIII -C and VIII -E. On The second and the thirdmeeting, the use of basic questioning with picture techniques was applied in the experimental classand traditional technique was applied in the control class. The sametheme was used in both classes. Posttest was conducted on two classes in the last meeting.

The administration of pretest and posttest to both of classes of experimental and control was aimed find out the students ability in writing descriptive text before and after basic questioning with picture in the experimental group. The result of students' achievement could be seen from the pretest and posttest result. While the results of pretest indicates similar mean scores of the two groups, suggesting similar ability in writing before the experiment, the mean scores of the post test show different values. The mean score of the experimental group is higher than that of the control group.

The result of all statistical analysis suggests that the application of basic questioning with picture is more effective than traditional technique. The experimental group achieved higher than the control group. By using basic
questioning with picture students' English writing is better. The technique helps the students to lead the ideas and to have critical thinking. The students also found that using basic questioning with picture was interesting in learning writing descriptive text. Furthermore, basic questioning technique could help the teacher of SMPN 2 Paciran in teaching English especially in teaching writing descriptive text.

