## CHAPTER IV

## RESULT AND DISCUSSION

In this chapter the data are presented and analyzed based on what the researcher obtained from the experiment conducted at the eighth grade of SMP BAITUSSALAM Ketintang Madya Surabaya. To measure the data, t-test formula was applied to calculate the result of pretest and posttest from the experimental and the control group.

## A. Data Presentation

This study was conducted to find out whether there is significant difference between the students who were taught by using reflection experience technique and those who were not taught by using reflection experience technique. The data were collected from the students' pretest and posttest score. Before treatment, the researcher administrated pretest to all the students to get information whether the students of 8 A and 8 B had similar ability in English writing. The post test was administrated after the treatment to both experiment and control groups.

## B. Results

In this study, reflection experience was used to improve the student writing ability in free writing with students' experience. This study was conducted to know if there is a significant difference between the students who were taught using reflection experience technique and those who were taught
by using traditional technique. The answer to this question is derived from any difference in score from pretest and posttest of the experimental group and the control group.

## 1. The Result of Experimental and Control Groups

The data were collected from two groups, the experimental and the control groups. The researcher put the score of pretest and posttest of the experimental group and the control group in the table. The researcher calculated the pretest score and the mean.

Pretest was conducted on Friday $19^{\text {th }}$ of July 2013. The pretest in the experimental group and the control group was given on the first meeting. Pretest was given to the eighth grade of SMP Baitussalam Ketintang Madya Surabaya, especially for students of 8 A and 8 B . Pretest in the experimental and the control group were attended by 29 students.

After giving the pretest in the experimental and the control group of students, treatment was given ton the experimental group in teaching English writing by using reflection experience, and the treatment was given by the teacher. Treatment was conducted on Monday $22^{\text {th }}$ of July 2013. The treatment in the experimental and control group was given in the second meeting until fourth meeting, treatment was given to the eighth students, especially for 8 A and 8B. Treatment in the experimental and the control group were attended by 29 students and so the posttest.

Post test was conducted on Saturday $03^{\text {th }}$ of Augustus 2013. Posttest in the experimental group and the control group was given in the fifth meeting on the same week. The used of the posttest was to know whether there were improvements in the student's ability on writing narrative text in the experimental group by using reflection experience.

There were steps to analyze the data in this research. The researcher took the scores of the pretest and posttest of experimental and control groups in the table. The researcher calculated the data of pretest score and the mean. The result of pretest in experimental and the control groups were presented in the following Table 4.1.

Table 4.1

The pre-test score and the means of experimental and control class

| Group | $\mathbf{N}$ | Total Score | Mean |
| :--- | :---: | :---: | :---: |
| Experimental class | 29 | 1604 | 55,3 |
| Control class | 29 | 1476 | 50,9 |

The result is described through the following figure.


Figure 4.1
Chart of pretest score and means in the both of groups.
The pretest also administered for class VIII A and B in SMP BAITUSSALAM Ketintang Madya Suabaya as the control group and the experimental group. The table showed that the sum of the pretest scores was 1604 for the experimental groups and 1476 for the control groups. While, the mean of the pretest scores of the experimental group was 55.3 and the control group was 50.9. It means that the students of two groups have same ability before the treatments were given.

After giving the pretest in the experimental and the control group of students, treatment was given to the experimental group in teaching English writing by using reflection experience, and the treatment was given by the teacher. The treatments of this study were the use of reflection experience technique, the themes of the activity was making a simple narrative text about my holiday, my favorite prize, and my pet. In general, the three treatments were started with the
greeting and sharing about the purpose of the study. Before giving treatment by using reflection experience, the teacher did the following steps.

- The teacher opened the class by reading Al-Fatihah together with the students.
- The teacher checked the attendance of the students.
- The teacher explained about narrative text to the students.
- After that, the teacher explained that narrative text commonly uses simple past tense. And the teacher explained about simple past tense.
- The teacher stimulated students in the experimental class by showing picture related to the themes. While showing the picture, the teacher's ask the questions related to the picture and the themes, for example:

What do you think about this picture?

Do you like to visit WBL place?

Do you have a favorite praise?
What favorite praise that you want?
Do you have pet at home?
What favorite pet that you have at home?

- After students responded the teacher's question, the teacher divided the students into 5 groups, each with five or four students.
- The teacher explained for students about the past tense and how to write simple narrative text
- After that, the teacher gave opportunity for students asked what the students not understanding about the teacher explained.
- The teacher asked the participant of the groups to take a paper to worksheet based on the groups.
- After the students understand what the teacher explained about narrative, the function and formula about past tense, the teacher gave the students exercise wrote vocabulary related to with favorite praise picture, and made a sentence using past tense.
- The teacher corrected what the group or students in the point above or their worksheet.
- And then the teacher gave instruction to the students to stand up and the teacher to ask the students related with the topic, to develop the students' idea.
- After that, the students sat back to their chair and the teacher gave opportunity to the students to ask what they had not understood about the material.
- After the students understood about narrative, the function and formula about past tense, and made a sentence using past tense and teacher gave the students exercise.
- They were asked to their experience about their favorite praise. The instruction used was 'Please write your holiday experience used past tense, by individual approximately 80 words!’
- The teacher gave 20 minutes for the students to do the exercise. After the students had finished writing the teacher corrected the students work at home.

The result of the mean of the experimental and control groups and the posttest score were presented in following Table 4.2.

Table 4.2
The post-test score and the means of experimental and control class

| Group | N | Score | Mean |
| :--- | :---: | :---: | :---: |
| Experimental class | 29 | 2087 | 71,9 |
| Control class | 29 | 1482 | 51,1 |

The result is described through the following figure.


Figure 4.2
Chart of posttest score and means in the both of groups.
The table showed that the posttest scores was 2087 for the experimental groups and 1482 for the control groups. While, the mean of the pretest scores of the experimental group was 71.9 and the control group was 51.1 . It means that the students of two groups have improvement ability after the treatments were given.

From the result of pretest and posttest scores of experimental group, the posttest score was higher than the pretest. It can be seen through the following Table 4.3

Table 4.3
The improvement of Experimental Group and Control Group

| Group | Mean | Mean | Improvement |
| :--- | :---: | :---: | :--- |
|  | Post-test | Pretest |  |
| Experiment class | 71.9 | 55.3 | 16.6 |
| Control class | 51.5 | 50.9 | 0.6 |

The result is described through the following figure.


Figure 4.3
Chart of the improvement of Experimental Group and Control Group.
The table showed that the improvement of posttest scores was 16.6 for the experimental groups and 0.6 for the control groups. The mean of the pretest scores of the experimental group was 55.3 and the control group was 50.9 . While the mean of the posttest scores of the experimental group was 71.9 and the control group was 51.5.

Overall the improvement between pretest and posttest score of the experimental group is higher than the control one. Then the researcher calculated the two means of posttest scores by using $t$-test formula to know whether it is significant or not.

## B. Calculating t-test.

After the researcher gave the pretest, treatments and posttest, then the researcher calculated the difference of the pretest and posttest scores between the experimental and the control groups to find out whether the result difference is significant or not between the experimental and the control 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 4.4 presents the result of the calculation.

Table 4.4
The Result of Standard Deviation.

| Group | $\mathbf{N}$ | Posttest Mean | SD |
| :--- | :---: | :---: | :---: |
| Experimental class | 29 | 71.9 | 5.60 |
| Control class | 29 | 51.5 | 4.47 |

The result on the data in table above shows that the standard deviation (SD) of the experimental group is 5.60 which is higher than that of the control group which is 4.47. It means that there is significant difference in posttest score between the experimental group and the control one. After knowing the mean of pre-test and post-test, then the researcher found the mean difference between pretest and posttest both of class. The result of the calculation is presented in table 4.5.

Table 4.5
The Result of Mean Difference

| Group | Number of <br> student | Pretest | Posttest | Mean |
| :---: | :---: | :---: | :---: | :---: |
| Different |  |  |  |  |
| Experimental | 29 | 1604 | 2087 | 17 |


| Control | 29 | 1476 | 1482 | 0.21 |
| :--- | :--- | :--- | :--- | :--- |

From the table above, it can be seen that the mean difference of pre test and post test of the experimental class is higher than that of the control class. The mean difference between pre test and post test in the experimental group is 17 while the mean difference in the control group is 0.21 . It means that the students' score after treatment with reflection experience is much higher than the students’ score in the class that used traditional technique. It can be concluded that the treatment given by reflection experience technique has better influence than traditional technique.

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

$$
\begin{aligned}
& t=\frac{\overline{X_{1}}-\overline{X_{2}}}{\sqrt{\frac{S_{1}^{2}}{N_{1}}+\frac{S_{2}^{2}}{N_{2}}}} \\
& =\frac{71.5-51.5}{\sqrt{\frac{31.4}{29}+\frac{19.9}{29}}} \\
& =\frac{20}{\sqrt{1.1+0.7}} \\
& =\frac{20}{\sqrt{1.34}} \\
& =14.9
\end{aligned}
$$

The result of the calculation is presented in the table 4.6 below.

Table 4.6
The Result Calculation of Deviation Square and t-test

| Subject | N | Deviation square |  | t-value | t-table |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Experiment | Control |  |  |
| Experiment <br> group | 29 | 31.4 | - | 14.9 | 2.045 |
| Control <br> group | 29 | - | 19.9 | 14.9 | 2.045 |

Next, after all data were calculated, the $t$-test the researcher must determine the degrees of freedom first by using formula as bellow:

Degree of freedom: N $1+\mathrm{N} 2-2$

$$
\begin{aligned}
& =29+29-2 \\
& =56
\end{aligned}
$$

The data showed the sum of deviation of each groups from the $t$-value and the t -table. From the presentation above, it could be seen that the deviation square of the experimental group is 31.4 while that of the control group is 19.9. Based on the calculation of $t$-test, then the comparison of $t$-value with $t$-table distribution with the significance level of 0,05 and degree of freedom 56 on the table is 2.021 . Then the result of $t$-value is 14.9 , it was found out that the value in $t$-table is 2.045. So, it is clear that there is significant difference between the students who
were taught by using reflection experience in the experimental class and who were taught by using traditional technique in the control class. In other words, the treatments by using reflection experience significantly influence the students' scores of writing ability.

## C. Hypothesis Testing.

To test the hypothesis t -score was compared to t -table. By looking at the calculation above which states that t -value is bigger than t table with significant level of $5 \%$, t-table score is 2.045 . It means that the alternative hypothesis is accepted and approved and $\left(\mathrm{H}_{0}\right)$ is rejected. This means that the independent variable, i.e. the reflection experience, influences the dependent variable, i.e. students' writing skill. The mean score of posttest of the experimental group is 71.9 and that of the control group is 51.1. It means that the mean score of the experimental group is higher than the mean score of the control group. So, the reflection experience technique improve the students' writing better than traditional technique in teaching writing text among students' class VIII at SMP BAITUSSALAM Ketintang Madya Surabaya.

## D. Discussion

This research is a study of writing by using experimental method. Reflection experience technique was used as a new method and was compared to traditional methods. Because this study used the experimental method, so this research assigned two classes for the sample. Class VIII-B as the experimental group was taught by using reflection experience technique and class VIII-A as the control
group was taught by using traditional technique. Experimental study was conducted over four meetings. On the first meeting the pretest was conducted for both classes VIII -A and VIII -B. On the second, third, and fourth meeting, the use of reflection experience techniques in the experimental class and traditional technique in the control class were conducted with the same theme. On the fifth meeting, posttest was conducted on the two classes.

The result of students' achievement could be seen from the pretest and posttest result. From the results of pretest, the means of the writing ability of the two groups were slightly different. On the other hand, the result of the posttest shows different values. The mean score of the experimental and control groups are different. The experimental group achieved higher improvement than the control group. So based on the research problem, with the following question "is reflection experience more effective than traditional technique"?, this study concludes that the teaching of writing by using reflection experience technique is more effective than traditional technique in improving the students' writing skills.

