#### **CHAPTER III**

# **RESEARCH METHOD**

This chapter presents the method of the study. The research methods includes the research design, research hypotheses, research variable, subject of the study, population and sample, research instruments, research procedure, scoring technique, data collection technique, data analysis technique.

#### A. Research Design

Research design is strategy to arrange the setting of research in order to get the valid data that are suitable with the variable and the objective of the research.<sup>1</sup> This research was conducted using experimental method. Experimental research is the way to find a causal relationship (relationship clause) between the two factors that are deliberately caused by the researcher by reducing or setting aside other factors that interfere and done to see the effect of treatment.<sup>2</sup>

In this research, the researcher selected two classes, the control group and the experimental group. The experimental was taught by reflection experience technique while the control group was taught by traditional technique. The research design of pretest and posttest control and experimental group can be illustrated as follows:

A
$$Y_1$$
X $Y_2$ Explanation:B $Y_1$  $Y_2$ 

 <sup>&</sup>lt;sup>1</sup> Mardalis, *Metode Penelitian Suatu Pendekatan Proposal*, (Jakarta: Bumi Aksara, 1995), p. 24
 <sup>2</sup> Suharsimi Arikunto, Prosedur Peneltian Sauat Pendekatan Praktek, (Jakarta: Bina Aksara, 1987), p.3

A & B : Experiment and control groups that are chosen randomly

- Y<sub>1</sub> : Pre-treatment test (pretest) of experiment and control groups
- Y<sub>2</sub> : Post-test of experiment and control groups
- X : Treatment (Teaching writing by using reflection experience)

The control group is coded as B while the experimental group is coded as A. Both classes were given pretest  $(Y_1)$ . It was administrated in order to know students' English writing before treatment. After that, the treatment (X) conducted to the experimental group. They were taught by reflection experience technique. At the end of the treatment, posttest  $(Y_2)$  was administrated to both the experimental and the control group to know the students' English writing ability. Therefore, the purpose of this study is to answer the research problem as written in the first chapter, exactly to find if using reflection experience as technique is more effective than the traditional technique to improve students writing skill at SMP BAITUSSALAM Ketintang Madya Surabaya.

## **B.** Variable of the Research

This research has of two variables: independent variable (X) and dependent variable (Y). The variables in this study are explained below:

## 1. Independent variable

Independent variable is variable that influences or that becomes the cause of change or emergence the dependent variable<sup>3</sup>. The independent

<sup>&</sup>lt;sup>3</sup> Sugiyono, Metode Penelitian Kuantitatif Kualitatif dan R & D, (Bandung: Alfabeta, 2009), p. 39.

variable in this research is using reflection experience in the teaching writing.

#### 2. Dependent variable

In this study the dependent variable is the student writing skill at SMP Baitussalam Ketintang Madya Surabaya. As stated by Ary, the dependent variable is the variable that is affected by independent variable<sup>4</sup>.

# C. Subject of the Study

# 1. Population

According to Arikunto population is the whole subject of the research.<sup>5</sup> So the in this study the population was SMP Baitussalam Ketintang Madya Surabaya. In this study there were three classes from 8A to 8C with 91 students as the total number of students.

## 2. Sample

Sampling is the process of selecting a number of individuals (objects of research) for a study such the individual (the object of study) is representative of a larger group on the selected object.<sup>6</sup> The samples were two of classes with the total number of the sample was 58 students. In this study the sample are 8 A and 8 B. Class 8 B was chosen as the experimental class and 8 A as the control. Each class had 29 and 29 students. Both were chosen based on the teacher's recommendation.

<sup>&</sup>lt;sup>4</sup> Donald Ary, *Introduction to Research Education*, (New York: Philadelphia press. A, 1997).p.31
<sup>5</sup> Suharsimi Arikunto, *prosedur penelitian*, p 130

<sup>&</sup>lt;sup>6</sup> Sumanto, Metodologi Penelitian Sosial & Pendidikan, (Yogyakarta: Andi Offset, 1995), p. 39

# **D. Data Collection Techniques**

Data collection technique is ways to collect data in a research.<sup>7</sup> Test is a method of measuring person ability, knowledge or a performance in a given domain.<sup>8</sup> Adapted from Arikunto, test is a series of question or exercise or the instrument used to measure skill, knowledge, intelligence, capability, or talent belonging to every individual or group.<sup>9</sup> In this study, test is the most important to collect the data. It was used to study the research of writing by using reflection experience as technique to improve students writing. In this study, tests were administered in the following ways;

## a) Pre-treatment test

The data was collected through pre-treatment test in both classes in order to know if the experimental group and control group had similar ability in writing.

### **b)** Posttest

After reflection experience technique was implemented in the experimental group, posttest was given to the experimental group and control group. Posttest was used to know the students' writing result after the experiment. The result of the test was scored and calculated.

<sup>&</sup>lt;sup>7</sup> E. Kristi. Poerwandari, *Pendekatan Kualitatif untuk Perilaku Manusia*, Depok: Mugi Eka Lestari, 115.

<sup>&</sup>lt;sup>8</sup> Louis Cohen, "*Research Method in Education*" (London and New York: Routledge, 2007), 414. <sup>9</sup> Arikunto

#### **E.** Instrument of the Research

The researcher used some instruments in order to get the data. Instrument of this research was applied to measure independent variable value that was accurate and valid based on my lecture Prof. Arief Furchan, MA, PhD (see on appendices). The instruments are test (pre-test and post-test).

#### 1. Test

The test was used to determine the result of student learning in writing through reflection experience technique and Traditional technique. Furthermore, the composition in this test was analyzed based on the content, organization, vocabulary, language use and mechanic.

In this study, test is an essay test or subjective test. In essay test of writing, the students are given a free chance to think as much as possible, because can freely express and organize their ideas in written form. Test is a method of measuring person ability, understanding in a given domain.<sup>10</sup> This statement is used to collect data about score of the test that were given to both of groups. There were some steps to conduct the test:

1) Pre-test

In this research used two classes, they were 8B as the experimental group and 8A as control group, both of them were given pre-test, the purpose of pre-test was used to found the students' English writing ability in narrative text.

<sup>&</sup>lt;sup>10</sup> Louis Cohen, "Research Method in Education" (London and New York: Routledge, 2007), p. 414

# 2) Post-test

After doing pretest, treatments were given to both classes, but there were different treatments in each class. The posttest was conducted to measure the effect of using reflection experience after the application of treatment in experimental group. Traditional technique used in control group and reflection experience used in experimental group. The improvement was measure through posttest.

The writer used analytic scoring to score student, there are a number of advantages to analytic scoring. First, it disposes of the problem of uneven development of sub skills in individuals. Secondly, scores are compelled to consider aspects of performance which they might otherwise ignore. Thirdly, the very fact that the scorer has to give a number of scores will tend to make the scoring more reliable.<sup>11</sup>

No	Score	Level	Criteria	Comment	
1	Content	30-27	Excellent to very good	Knowledge, substantive development of thesis, relevant to assigned topic.	
		26-22	Good to average	Sure knowledge of subject, adequate range, limited development of thesis, mostly relevant to topic but lacks detail	

Rubric for Measuring Writing (ESL Composition Profile)

<sup>&</sup>lt;sup>11</sup> Jacobs, et.al., Issues in Language Testing. ELT Documents 111. (London:The British Council, 1981), 102.

		21-17	Fair to poor	Limited knowledge of subject, little substance, inadequate development	
		16-13	Very poor	Does not show knowledge of subject, non substantive, not pertinent, or not enough to evaluate.	
2	Organizati on	20-18	Excellent to very good	Fluent expression, ideas clearly stated or supported, succinct, well organized, logical	
		17-14	Good to average	Somewhat choppy, loosely organized but mean ideas stand out, limited support, logical but incomplete sequencing	
		13-10	Fair to poor	Non-fluent, ideas confused or disconnected, lack logical sequencing and development	
		9-7	Very poor	Does not communicate, no organization, or not enough to evaluate	
3	Vocabular y	20-18	Excellent to very good	Sophisticated range. Effective word/idiom choice and usage. Word form mastery. Appropriate register	
		17-14	Good to average	Adequate range. Occasional errors of word/idiom form, choice, usage <i>but meaning not</i> <i>obscured</i>	
		13-10	Fair to poor	Limited range. Frequent errors of work/idiom form, choice, usage but <i>meaning not obscured</i>	
		9-7	Very poor	Essentially translation, little knowledge of English vocabulary, idioms, word from, or not enough to evaluate	

4	т	25.22	T 11 · ·	
4	Language use	25-22	Excellent to very good	Effective, complex construction, few errors of agreement, tense, number word order/ function, articles, pronoun, preposition.
		21-18	Good to average	Effective, but simple construction, minor problems in complex construction, several errors of agreement, tense, number word order/function, articles, pronouns, preposition, but meaning seldom obscured
		17-11	Fair to poor	Major problem in simple complex construction, frequent errors of negotiation, agreement, tense, number, pronouns, preposition and fragment, run nouns, deletion, meaning confused and obscured.
		10-5	Very poor	Virtually not mastery of sentence construction rules, dominated by errors, does not communicate, or not enough to evaluate.
5	Mechanics	26-22	Excellent to very good	Demonstrates mastery of convention, few errors of spelling, punctuation, capitalization, paragraphing.
		21-18	Good to average	Occasional, errors of spelling, punctuation, capitalization, paragraphing but meaning not obscured.
		20-17	Fair to poor	Frequent errors of spelling, punctuation, capitalization, paragraphing, poor handwriting, meaning confused or obscured.
		16-13	Very poor	No mastery of conversations, dominated by errors of spelling, punctuation, capitalization, paragraphing, handwriting,

		illegible, or not enough to evaluate
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## **F. Research Procedure**

To answer the research problem of the study, pre-test and posttest were conducted. There are some steps was taken by the writer. They are as follows;

1. Preliminary visit (meet the administration officer)

The writer asked permission to the headmaster of SMP BAITUSSALAM Ketintang Madya Surabaya by giving the permission letter.

2. Contact the headmaster

The writer visited the school to get information about teacher and students as participants. To gain the information, the writer asked the administration staff.

3. Contact the English teacher

After getting permission from the headmaster, the writer met the English teacher to ask for his help and guidance for the writer to conduct the research. And the writer explained about the test and the material to students.

1. Organizing Teaching Procedure

This experimental study was to see the effect of teaching technique in writing to the students of two different groups: the experimental group and the control group. The experimental group was taught by using reflection experience technique while the control group was taught using the traditional technique of teaching.

Pretest was conducted before the treatment while posttest was after the treatments. Such activities were conducted to both groups to see the improvement of their writing ability. The research schedule is figured out in the following Table 3.1.

No	Experi	mental group	Control group		
	Date	Theme/material	Date	Theme/material	
1	19 <sup>th</sup> July 2013	Pre-test	19 <sup>th</sup> July 2013	Pre- test	
2	22 <sup>th</sup> July 2013	Treatment 1:	22 <sup>th</sup> July 2013	Treatment 1:	
		Taught using		Taught using	
		reflection experience		Traditional	
		technique with the		technique with the	
		theme My Holiday		theme My Holiday	
3	24 <sup>th</sup> July 2013	Treatment 2:	24 <sup>th</sup> July 2013	Treatment 2:	
		Taught using		Taught using	
		reflection experience		Traditional	
		with the theme My		technique with the	
		Favorite Praise		theme My Favorite	
				Praise	
4	27 <sup>th</sup> July	Treatment 3:	27 <sup>th</sup> July 2013	Treatment 3:	
	2013	Taught using		Taught using	
		reflection experience		Traditional	
		with the theme My		technique with the	

Table 3.1

			pet			theme My pet
5	03 <sup>th</sup>	August	Post-test	03 <sup>th</sup>	August	Post-test
	2013			2013		

## 1. The Experimental Group

Based on the result of the pretest, the researcher conducted the treatment to solve the problem. The problem of the students is difficulty in writing skill, the researcher given the treatments were done in three, Monday 22<sup>th</sup> July, Wednesday 24<sup>th</sup> July, and Saturday 27<sup>th</sup> July. Pretest was given to the experimental and the control groups on the first meeting. The treatment was given on the second, third and fourth meeting and posttest was given on the last meeting of this research.

The treatments of this study were the use of reflection experience technique for the experimental group. Reflection experience would be a help for the students especially in writing. So, the product of writing can be understood more easily by the readers. Each of the treatment is described below.

a) First treatment

The first treatment was held on Monday 22<sup>th</sup> July, 2013. In this time the students were taught by using reflection experience technique. The theme of the activity was developing a simple narrative text about 'my holiday'.

The first treatment was started with the greeting and sharing the purpose of the study. Before giving treatment by using reflection experience, the teacher did the following steps.

- 1. The teacher opened the class by reading Al-Fatihah together with the students.
- 2. The teacher checked the attendance of the students.
- 3. The teacher explained about narrative text to the students.
- 4. After that, the teacher explained that narrative text commonly uses simple past tense. And the teacher explained about simple past tense.
- 5. The teacher stimulated students' the experimental class by showing WBL (Wisata Bahari Lamongan) picture. This picture was selected because the theme of the first treatment was "My Holiday". While showing the picture, the teacher asked the questions below:

Do you like to visit WBL place?

Have you ever gone there?

- 6. After students responded the teacher's question, the teacher divided the students into 5 groups, each with five or four students.
- 7. The teacher explained for students about the past tense and how to write simple narrative text

- 8. 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.
- 10. After the students understood what the teacher explained about narrative, the function and formula about past tense, the teacher gave the students exercise wrote vocabulary related to with WBL picture, and made a sentence using past tense.
- 11. The teacher corrected what the group or students in the point above.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. They were asked to their experience about their holiday. The instruction used was 'Please write your holiday experience used past tense, by individual approximately 80 words!'

- 16. 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.
- b) Second treatment

The second treatment was held on Wednesday 24<sup>th</sup> July, 2013. In this time the students would be toughed to use reflection experience technique with different theme as the first meting but the activities was similar. The theme of this meeting was 'my favorite praise'.

The second meeting was not so different with the first meeting. The treatment was 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;

- 1. The teacher opened the class by reading Al-Fatihah together with the students.
- 2. The teacher checked the attendance of the students.
- 3. The teacher explained about narrative text to the students.
- 4. After that, the teacher explained that narrative text commonly uses simple past tense. And the teacher explained about simple past tense.
- 5. The teacher stimulated students' in the experimental class by showing praise picture. This picture was selected because the

theme of the first treatment was "My Favorite Praise". While showing the picture, the teacher's ask the questions below: What do you think about this picture? Do you have a favorite praise? What favorite praise that you want?

- 6. 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
- 8. 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.
- 10. 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.
- 11. The teacher corrected what the group or students in the point above or their worksheet.
- 12. 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.

- 13. 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.
- 14. 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.
- 15. 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!'

- 16. 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.
- c) Third treatment

The third treatment was held on Saturday 27<sup>th</sup> July, 2013. In this time the students would be toughed to use reflection experience technique with different theme as the first meting but the activities was similar. The theme of this meeting was "my favorite pet".

The third meeting did not so different with the first and second meeting. The treatment was started with the greeting and sharing about the purpose of the study. Before the teacher gave a treatment with Reflection experience technique, the teacher did the following steps;

- 1. The teacher opened the class by reading Al-Fatihah together with the students.
- 2. The teacher checked the attendance of the students.
- 3. The teacher explained about narrative text to the students.
- 4. After that, the teacher explained that narrative text commonly uses simple past tense. And the teacher explained about simple past tense.
- 5. The teacher stimulated students' the experimental class by showing praise picture. This picture was selected because the theme of the first treatment was "My Favorite Pet". While showing the picture, the teacher ask the questions below:

What do you think about this picture?

Do you have pet at home?

What favorite pet that you have at home?

- 6. 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
- 8. 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.
- 10. 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.
- 11. The teacher corrected what the group or students in the point above or their worksheet.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. They were asked to their experience about their favorite pet. The instruction used was

'Please write your holiday experience used past tense, by individual approximately 80 words!'

16. 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.

## 2. The Control Group

The control group was taught as usual without the teaching strategies as in the experimental group. The students were given pretest as in the experimental group in the first meeting and second, third and fourth meeting the students were taught as usual without treatment. And the last meeting the students were given posttest.

a) First Treatment

The first treatment was held on Monday 22<sup>th</sup> July, 2013. In this time the students was taught used traditional technique. The theme of this meeting was about "My Holiday" The teacher ask the students to tell about their holiday without any treatment.

The first treatment was started by the teacher in the following steps.

- 1. The teacher opened the class by reading Al-Fatihah together with the students.
- 2. The teacher ordered the students to open the book
- 3. And the teacher explained based on the subject material.
- 4. The teacher asked the students to exercise in the LKS based on the material.

- 5. After the students had done, the teacher asked the students to collect the LKS on the teacher's table.
- 6. The teacher corrected the LKS at home.
- 7. Next, teacher asked students and gave opportunity to students who students not understand or confused about the material.
- 8. The last teacher gave the students a home work to write about "my holiday" based on your holiday experience last week.
- b) Second Treatment

The second treatment was held on Wednesday 24<sup>th</sup> July, 2013. In this time the students were taught used traditional technique. The theme was about "My Favorite praise" The teacher asked students to tell about their favorite praise.

The second treatment was started with the greeting and sharing about purpose of the study. The second treatment was conducted in the following steps.

- 1. The teacher opened the class by reading Al-Fatihah together with the students.
- 2. The teacher ordered the students to open the book.
- 3. And the teacher explained based on the subject material.
- 4. The teacher asked the students to exercise in the LKS based on the material.

- 5. After the students have done, the teacher asked the students to collect the LKS on the teacher's table.
- 6. The teacher corrected the LKS at home.
- 7. Next, teacher asked students and gave opportunity to students who students not understand or confused about the material.
- 8. The last teacher gave the students a home work to write about "my favorite praise" based on your favorite praise experience.

## c). Third Treatment

The third treatment was held on Saturday 27<sup>th</sup> July, 2013. In this time the students was taught used traditional technique. The theme of this meeting was about "My Favorite Pet" The teacher asked students to tell about their favorite pet.

The third treatment was started with the greeting and sharing about the purpose of the study. The third treatment was conducted in the following steps.

- 1. The teacher opened the class by reading Al-Fatihah together with the students.
- 2. The teacher ordered the students to open the book
- 3. And the teacher explained based on the subject material.
- 4. The teacher asked students to exercise in the LKS based on the material.

- 5. After the students have done, the teacher asked students to collect the LKS on the teacher's table.
- 6. The teacher corrected the LKS at home.
- 7. Next, teacher asked students and gave opportunity to students who students not understand or confused about the material.
- The last teacher gave the students a home work to write about "my favorite pet" based on your favorite pet experience.

### G. Data Analysis Technique

After collecting the data of from pre-treatment test and post test from the experimental group and control group, then the researcher measured the score differences by using the statistical calculation. In this study, the researcher used t– test formula to find out whether the mean difference between them is significant or not. The students' scores were analyzed statistically by using a procedure of t– test, with the steps below.

First, the researcher put the scores of the pre test and post test of experimental and control groups in the Table of both groups. Second, the researcher calculated the mean from overall scores of pre test and post test of both groups. The calculation of the mean used the following formula:

$$MEAN: \sum \frac{fx}{N}$$

Where: M = mean

 $\sum fx = \text{total of the test}$ 

N = total of students

Third, after collecting the data of pre test and post test score from both of groups, then the researcher calculated of the mean of difference score between the pre test and post test of each group through the formula below:

$$Md:\frac{\sum d}{N}$$

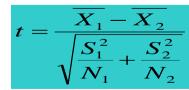
Where: Md = mean of the different score pre test and post test each groups

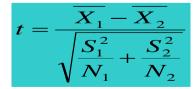
 $\Sigma d$  = the total of different score.

N = total of students taking the test.

After collecting the data of pre test and post test from both groups, the researcher analyzed the data through t- test to find out whether the difference of the scores between them was significant or not. Before calculating the t-value, the researcher used the following formula to find the sum deviation square of each group

Through the following formula:





Where:

- $\overline{x^1}$  = The average score of experiment class
- $\overline{x^2}$  = The average score of control class
- $S_1$  <sup>=</sup> the deviation of experiment class
- $S_2$  <sup>=</sup> the deviation of control class
- N <sup>=</sup>total number of student taking a test

After calculating all of the scores, the researcher calculated the number of degree of freedom by adding the individual of each group, then subtract of two.

The formula as follows: 
$$df = N1+N2-2$$

Where:

df =degree of freedom

N1 = number of subject in experimental class

N2 = number of subject in control class

Standard of significance.<sup>12</sup> = 0,025

After doing those steps, the researchers concluded the result of the research by test the hypothesis.

<sup>&</sup>lt;sup>12</sup> Suharsami Arikunto, prosedur penelitian, p. 310