CHAPTER III

RESEARCH METHOD

In this chapter, the researcher presents the procedures of conducting research. Those are research design, research subject, research instrument, data collection, and data analysis.

3.1 Research Design

Research is a process which is used to collect and analyze information to increase our understanding of a topic or issue (Creswell, 2011:3). Research helps the researcher to get accurate result of the topics discussed. In this case, the researcher have to select some techniques to gain and analyze the required data. There were many procedures of conducting research which enable the researcher to collect and analyze the data. In this research, the researcher used an experimental research.

Ary (2010:301) states that “An experimental design is the general plan for carrying out a study with an active independent variable.” Moreover, in experiment, researcher tests an idea (or practice or procedure) to determine whether it influences an outcome or dependent variable (Cresswell, 2011:295). Furthermore, Ary (2010:265) states that an experiment is a scientific investigation in which the researcher manipulates one or more independent variables, controls any other relevant variables, and observes the effect of the manipulations on the dependent variable(s). In other words, an experimental research is a process of plan to implement, test, or practice a study to find out an outcome with independent and dependent variable. The goal of experimental research is to determine whether a causal relationship exists between two or more variables (Ary, 2010:265).

When a researcher conducted educational research, it is not always possible to select or assign subject at random. The use and applications of various experiments depend on the type
of design used. In this case, the researcher used quasi-experimental research. It was because
the researcher could not artificially created groups for the experiment. Two intact groups
which had already been organized into two parallel classes were classified in two groups: an
experimental group and a control group. Both groups were treated differently.

Table 3.1
Table of Experimental Design

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test</th>
<th>Treatment</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Y1</td>
<td>-</td>
<td>Y2</td>
</tr>
<tr>
<td>C</td>
<td>Y1</td>
<td>X</td>
<td>Y2</td>
</tr>
</tbody>
</table>

B : Control group

C : Experimental group

Y1 : Pre-test of control and experimental group

Y2 : Post-test of control and experimental group

X : Treatment for experimental group

In accordance with the explanation, the researcher used an experimental design because
it was conducted to investigate the effectiveness of Think-Talk-Write model on students’
writing ability.

3.2 Variable of Research

There were two variables in this research: independent and dependent variable. Each of
them could be described as follows:

a. Think-Talk-Write model as independent variable (X)
b. Writing ability as dependent variable (Y)

3.3 Population and Sample

3.3.1 Population

According to Ary (2010:148), population is defined as all members of any well-defined class of people, events, or objects. The population of this research was all of the seventh grade students of SMP Bahrul Maghfiroh Malang consisting of 80 students of 4 classes.

3.3.2 Sample

Ary (2010:148) states that a sample is a portion of a population. The researcher used cluster sampling in this experiment. Cluster sampling is sampling which is not individual but a group of individuals who are naturally together. In this research, the researcher took only two classes as the samples. Thus, there were 42 students. The students were divided into two groups, the experimental group and the control group. The two classes used by researcher have represented the three existing classes.

3.4 Research Instrument

In this research, the researcher used test as the instrument. The researcher used writing pre-test and post-test.

3.5 Treatment

3.5.1 Treatment of the Experimental Group

The experimental group which consisted of 21 students was given the pre-test in order to know about their capability before the treatment. After giving a pre-test, the researcher explained the material by using Think-Talk-Write model. In the implementation phase, the researcher gave treatment by teaching the students using Think-Talk-Write model. The
Think-Talk-Write model was given as a new teaching model that breaks routine in teaching and learning process. After the treatment had already been given, the researcher gave a post-test to the students.

3.5.2 Treatment of the Control Group

The control group which consisted of 21 students was given the pre-test, in order to know their capability before the researcher explained the material. Different from the experimental or treatment group, for control group the materials were explained without using Think-Talk-Write model. After the material had already been taught, the researcher gave a post-test to the students.

3.6 Data Collection

The data for this research was obtained from the score of the writing pre-test and post-test. This was done by the researcher in order to investigate it using Think-Talk-Write model is effective or not to improve students.

To collect the data, the procedure are as follows:

3.6.1 Pre-liminary Test

Before doing the research, the researcher used vocabulary preliminary test in the form of multiple choices to determine or measure the intelligence level of students. This test was given to all of the seventh grade students at SMP Bahrul Maghfiroh Malang.

3.6.2 The Teaching of Experimental Group

1. Pre-experimental stage

This stage was the preparation of the experiment. The researcher had to prepare all of the materials required before giving the treatment. Next, the pre-test in written form was
given to students at the beginning of teaching and learning process or before the treatment. The students were given some pictures by the researcher. After that, the students had to write and answer the picture in a piece of paper. The result of the pre-test can show where and what the causes their deficiencies.

2. Treatment (Experimental stage)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Teaching process</th>
<th>Time allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment (Experimental stage)</td>
<td>1. The researcher introduced the topic that would be discussed on that day.</td>
<td>60 minutes</td>
</tr>
<tr>
<td></td>
<td>2. The researcher explained briefly and clearly about the material.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The researcher gave a sets of vocabulary and meaning appropriate with the topic to students.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. The researcher asked the students to find and write down some vocabulary related to the topic.</td>
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<tr>
<td></td>
<td>5. The researcher divided the students into 4 or 5 groups of discussion.</td>
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<tr>
<td></td>
<td>6. The researcher gave a picture to each group and asked them to analyze it.</td>
<td></td>
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<tr>
<td></td>
<td>7. The researcher asked to students to discuss and share about their</td>
<td></td>
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</tbody>
</table>
In the treatment stage, the students of the experimental group were taught writing by using Think-Talk-Write model. Think-Talk-Write model was used in accordance with the material in the textbook.

3. Post-experimental stage

After the treatment, the researcher gave the post-test to obtain the score and calculate statistically for the data analysis. Its result was used for interpretation and conclusion.

3.6.3 The Teaching of Control Group

1. Pre-teaching

Same as experimental group, in control group, the researcher had to prepare all of the materials. After that the pre-test in written form was given to students in order to obtain their knowledge at the beginning of teaching and learning process. The students were given some pictures by the researcher. After that, the students have to write and answer what the picture is in a piece of paper.
2. Whilst teaching

Different from experimental group, the students of the control group were taught English without using Think-Talk-Write model. The material was presented to the students by Think-Talk-Write model. This was the difference between experimental and control group.

The teaching and learning activities that conducted by researcher in control group as follows:

Table 3.2
Treatment for control group

<table>
<thead>
<tr>
<th>Stage</th>
<th>Teaching Process</th>
<th>Time Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whilst teaching</td>
<td>1. The researcher introduced the topic that would be discussed on that day.</td>
<td>60 minutes</td>
</tr>
<tr>
<td></td>
<td>2. The researcher explained briefly and clearly about the material.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The researcher gave a sets of vocabulary and meaning appropriate with the topic to students.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. The researcher gave a card that contains the name of thier partner for each student and the name of real object around them.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. The researcher asked the students to find, memorize, and write down some vocabulary related to the object in the card.</td>
<td></td>
</tr>
</tbody>
</table>
3. Post-teaching

The last stage of teaching and learning activity is post-experimental stage. After all of the materials have been taught, the researcher gave the post-test to know how about their ability and result of the activity. The scores from the two groups are compared to determine if they differ significantly.

3.7 Data Analysis

Data analysis was directed to determine whether the experimental group achieved better performance than the control group or not. The post-test scores of both groups were computed using data analysis of T Test. Computer (SPSS/PC+) operates all of the computation of the analysis of this research. In analysing the data, the researcher used following procedures:

1. Collecting the post-test sheets which were completed by the students
2. Tabulating the result of tests to find out the mean score of the post-test score

3. Counting the score on SPSS program

4. Describing the result of T Test computation to the effectiveness of Think-Talk-Write model.