CHAPTER III

RESEARCH METODH

Method is one of the important factors in the research activity. By using suitable methods, the reserch activity will get a good result. In order to get valid finding, the reseracher provides rules and procedures. In this chapter, the research method used will be discussed.

3.1. Research Design

This study used quantitaive method to find out the effect of reading comprehension using semantic mapping. In other word to find out whether there is effect on students' reading comprehension by using semantic mapping.

Based on the statement above, it can be said that this study is experimental research. It designs in the form of pretest and posttest using control group design. It can be seen clearly on the following schema:

A T1 ⟶ X ⟶ T2

B T1 ⟶ - ⟶ T2
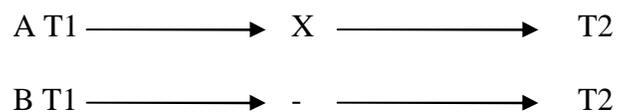
Where:

A = Experimental group

B = Control group

T1 = pre test

X = Treatment

T2 = post test

The definiton of the experimental design according to Barry Gribbons and Joan Herman is "Experimental designs are especially useful in addressing evaluation question about the effectiveness and impact or program"[1]

Based on the statement above, the writer can determine that experimental research is the sign used for evaluating question about effectiveness an impact or program which is taking sample or control class randomly. This research observes the possibility of causal effect by giving treatment to compare the result. The method that used in this research is descriptive quantitative method, where it used to describe a situation in the present time. In this paper, the writer tries to find out significance effect of semantic mapping on reading comprehension .

In this study, pre test was given to the students both in expeimental group and control group. Before doing pretest, the students were informed that they will be examined their capability in reading comprehension. The writer asked students to do by themselves. In the following day, the treatments were conducted for two weeks , in each treatment took forty minutes. In the following week, directly after treatments,

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[1] Barry, Gribbons & Joan, Herman. True and quasi-experimental designs. Practical Assessment, Research & Evaluation, 1997 5(14). Retrieve June 6, 2012 from http://PAREonline.net/getvn.asp?v=5&n=14

a post test was administered to the experimental and control group. In the last, the data from this study were analyzed.

3.2. Hypotheses

Hypothesis is a powerful tool in scientific inquiry. Ary et Al explain that "the hypothesis gives direction to the collection and interoretation of data."[2]

Derived from the formulated problem, the hypotesis is made: H(o) stated that there is no significance effect in reading comprehension achievement of the second grade students at MTs KH. M. NOER Kedung Mangu Masjid Surabaya. H(a) stated that there is significance in reading comprehension achivement of the second grade students at MTs KH. M. NOER Kedung Mangu Masjid Surabaya.

3.3. Setting of the Study

The research was conducted at MTs KH. M. NOER located on street Kedung Mangu Masjid no 28, Surabaya. The research was conducted at 01th -09th july 2012. After getting an agreement of the school principal and then consult to an English teacher who teaches at the second grade of MTs KH. M. NOER Kedung mangu Masjid Surabaya.

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[2] Ary, Donal. et. Al. *Introduction to Research in Education.* (Illinols. Harcout Brace College Publisher: 1990) p.95

1. **Population**

   According to Borg the large group we wish to learn about is called poplation.[3] The population of this study was the student at MTs KH. M. NOER Kedung Mangu Masjid Surabaya.

2. **Sample**

   Part of the population is called a sample.[4]To get the sample of the study, the writer took two classes, VIII A and VIII B. the sample of experimental group is 24 students, taken from one class namely class VIII B while class VIII A as a conntrol group. In taking the sample, the writer will permit to the school principal and English teacher .

3.4. Research Procedure

For implementing this research, the writer has designed a procedure as a guide in implementing this study. Below is the procedure for this research;

3.4.1. Figure of Rereach Procedure

Conducting pretest

Treatment (semantic mapping)

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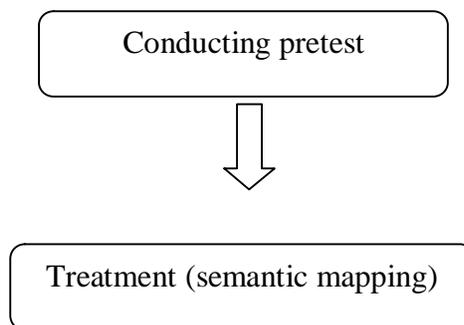
[3] Borg , Heaton . *Writing English language Test a practical Guid as a second of foreign language* 1974. P 238
[4] http://www.dissertation-statistics.com/population-sample.html

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        ⬇
┌─────────────────────────────┐
│      Conducting post test    │
└─────────────────────────────┘

            ⬇

┌─────────────────────────────────────┐
│  Calculating and Analyzing the test score │
└─────────────────────────────────────┘

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┌─────────────────────────────────────┐
│      Concluding the result of test    │
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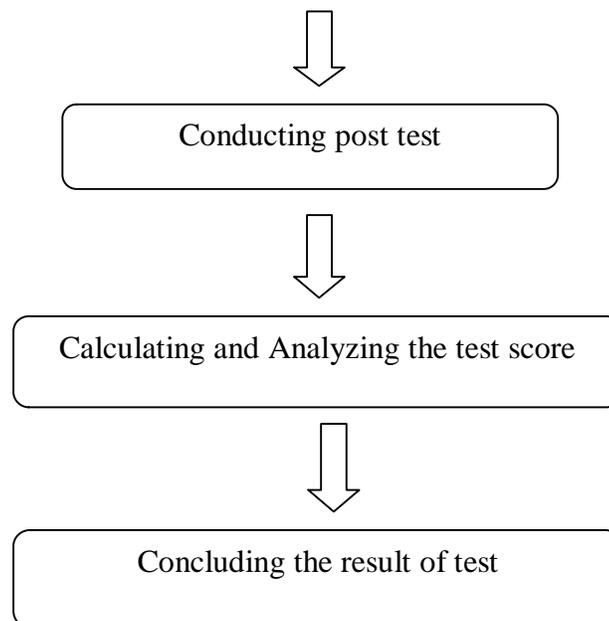
3.4.2. Implementation Semantic Mapping

Date	Time	Activity
August 2012 1th	40 minutes	Pre-tes
2th	40 minutes	Implementation of semantic mapping
3th	40 minutes	Implementation of semantic mapping

8th	40 minutes	Implementation of semantic mapping
9th	40 minutes	Post test

On the first day, writer has conducted pre test in experimental and control group. On the second, third and forth day writer had given special treatment for experimental group. In other words, the experimental group were taught using semantic mapping technique in reading comprehension skills While the control group were taught using different technique by their English teacher.

The treatments for the experimental group were carried for three days for 40 minutes per lesson. During this period, students were taught using semantic mapping. Firstly, the students in the class are divided into five group, and each of them have five members, inside each group, we put one clever, two average and two weak students and this selection is based on the result of pretest. Then the teacher asked students to pay attention on topic which had been written on the white board and also asked to start their work in each group. They write on the paper the vocabulary related to the topic as much as possible individually. Then, the teacher instructs representation of each group to write the result their work. In the middle of activity, students are asked to read a descriptive text that is distributed by teacher and write

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9th	40 minutes	Post test

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vocabulary which is unfamiliar. After reading a text individually, they discuss with their group until they could comprehend successfully the text and complete or answer related question. Mistakes of every member of group are considered as mistakes to other members at the same group.

At the post activity, the teacher asked each group to mention vocabulary they do not know. The aim of this activity is to solve the problem of each group who do not comprehend the text. Then the teacher instructs one of the students to be volunteer to read by translation. At the end the teacher read the text completely. On the last day, the writer conducted post test.

3.5. Data Collection Technique

In completing the data, the writer used two techniques, they are observation and testing

1. **Observation**

   Observation is done to identify the classroom during the teaching and learning process. It is done while the action is being implemented.

2. **Testing**

   Testing is done in pre test and post test. The result of pre test is used to know the students' reading comprehension achivement before getting the tretment while post test is used to determine the result of the study. It will be compared with the result of pre test.

3.6. Research Instrument

The research instrument plays an important role to collect data. The instrument used in this research is an objective test, and the writer used one type of objective test, which is *multiple-choice type.* Multiple-choice type can be scored objectively and can measure learning directly.

In this research, the test consisted of 40 items with four alternatives. The alternatives include one correct answer and three wrong answers. There are four passages and from each passage. The writer makes a question on reading comprehension including question of vocabulary, detail, not detail, and inference. The test of vocabulary is not only based on the contents of the passage in the text book but also taken from another book which is correlated to their study and syllabus.

From these tests, the writer takes all questions that have significant correlation with the students. compulsory book, like english in focus for Grade VII Junior high School (published by Artono Wardiman), Scaffolding English For Junior High School grade VIII (published by Joko Priyana) and work sheet (Lembar kerja siswa). So, the questions of the test calculated to measure the students' comprehension of the material that is given.

The marking scheme that use in this study is 1 (one) for the correct answer and 0 (zero) for the incorrect answer. Furthermore, the formulation which is used as follows:

$$\text{Mark} = \frac{\text{Score (total of correct answer)}}{\text{Total number of question}} \times 100$$

3.7. Data Analysis Technique

To find out the influence of semantic mapping on students' reading comprehension, the writer uses quantitative method for analyzing data. In this research, the writer did observation to students in teaching learning process. So the writer described the observation result and the effect of semantic mapping in teaching reading, and the writer analyzed testing in pre test and post test. For experimental group and cotrol group use a t-test with the SPSS formula