CHAPTER III
RESEARCH METHOD

In this research, the researcher needs a method to accomplish this research. In a research, a method has very essentially becomes guidance in a research. In this chapter, the researcher will formulate the concept of the research methods into six items, those are: research instrument, population, sample, data collecting techniques, data process and data analysis procedure in SPSS and T-test, data presenting method.

A. Research Instrument

Research instrument is a means used to collect the data. The form of instrument is a test. Arikunto said that instrument is a means by which something is performed or affected, and is a device for processing measurements (2006:78). The instrument that is used to collect the data in this research is a test about the ability of the students in answering English vocabulary test. The main reason why the researcher chooses the method is to measure the student’s ability in acquiring of English vocabularies.

Based on Arikunto, a test is any series of questions or exercises to measure skill, knowledge, intelligence, capacity, or attitude of an individual or a group. A test can be in form of true or false, multi choices, matching, completion, direct questions, and essay (2006:128). In this final project the researcher gives a test to students of
BBC English Training Specialist, especially the BE-2 level because this class had represented of teenager in ages.

A test paper of test consists of fifty questions including the four possible answers. From the result of this test, it can be known how the many words that those students are acquired.

Besides, the researcher himself has a main role in collecting data. This is caused by the difficulty to assure on what will be researched. Next, man as instrument has a weapon “can decide”, which can be used by him easily. He can also see and take decision. This instrument usually called participant-observation.

B. Population

The first step to do research is assuring source of data. Source of data in a research called population. Population is a research subject which becomes the whole population of this research. There are many terms of population. Arikunto said that population is a research object (2006: 102). Hadi stated that population is the whole research objects which are going to be generalized (1980: 70). Based on those theories, it can be concluded that population is the whole research subjects which have certain identification that is going to be found out in a research. Population method actually can be done in a condition in which the research subject is sufficiently limited. The population of this research is BE-2 students (teenagers), all of them are from Junior high school students, and the numbers of BE-2 students are twenty students (the data from BBC Schedule of May - July 2009) (Appendix 9).
C. Sample

In Harsono opinion, *sample is a part of population that believed and appraised can be representation of the whole population* (1999: 77). In addition, Arikunto states that *sample is part of population which will be investigated*. The researcher used purposive sampling in this research because the subjects are less than 100, it is better to take all subjects of population. Hence, the researcher used all the BE-2 students BBC English Training Specialist in Banyumanik, Semarang as a sample.

D. Data Collection Techniques

In gaining the data, the researcher has to be patient and careful in observing the students. The research instruments are one of the requirements for collecting the data that is direct question test. The test should be made clearly in order that students truly understand the instruction. In order to be succeeding, the researcher has to prepare those requirements for conducting the research. There are six steps that are carried out by the researcher;

1. Observing the class,

   The researcher observed both of experimental and control classes. The observation of the research conducted on 8th to 13th of June 2009 (Appendix 10). In observing the class, the researcher took some documentation, noted the students’ name and observed the process of learning English.
2. Preparing the research instruments,

The researcher typed some instruments that were used in the research. The instruments are English vocabulary test in 1000 and 1500 of words levels, and questionnaire.

3. Conducting Pre-test,

In conducting the research, the researcher gave the students pre-test to all of BE-2 students in 1000 of words level and 1500 of words level. The length of the test was 2 minutes. After that the researcher evaluated the students’ results.

4. Implementation of the PVC,

The PVC cards only implemented to the experimental class whereas, the control class did not have any PVC treatments at all in teaching the student, the researcher asked to the teacher to evaluate the researcher achievement.

5. Conducting the Post-test and giving questionnaire,

The researcher gave post-test to all of BE-2 students in English vocabulary test in 1000 of words level and 1500 of words level. The test was 2 minutes in length. Then the researcher evaluated the students’ post test results.

6. Analyzing the data either Pre-test or Post-Test.

In analyzing the data, the researcher took a beneficial by using SPSS program for Windows. The researcher classified the students worked into six items. Those are students’ pre test results in experimental class in 1000 of words level, 1500 of words level and average level. Then students’ post test results in experimental class in 1000, 1500, and average words level in different series of the test. In
contrasting to the experimental class, the researcher used the control class to compare the students’ achievement in learning vocabularies. In control class also gave pre-test in 1000 of words level, 1500 of words level and average of words level. In post-test also consist of 1000, 1500, and average words levels in different series of the tests.

Based on the schedule that has given to him, the researcher conducted Pre-test after observation class. Then the researcher held the Post-test and questionnaire at the end of the courses.

E. Data Process and Data Analysis Procedure in SPSS and T-Test

a. Data Process

There are two kinds of data analysis namely quantitative and qualitative approaches. In this research, the researcher uses the quantitative approach to analyze the data base on the numbers and the statistics calculation. Through the quantitative approach, the researcher will get accurate and valid of the data.

The researcher got the data from the students’ work. After the data collected, the researcher chose sample T-test analysis due to the subject of the research is the same subject but the test holding in twice. In processing the data, the researcher takes a beneficial by using SPSS for Windows program in identifying the students’ results. The researcher takes the following steps;

1. Tabulating the data in the form both of Pre-test and Post-test,
2. Calculating the score which are done by the students. Then the researcher uses statistical calculation in order to compute the quantitative data of this research. The researcher uses SPSS to process the data which consists of mean, median, standard deviation, correlation, maximum and minimum,

3. The researcher uses descriptive analysis to describe the statistic analysis.

b. SPSS and T-test

SPSS for windows is application program which used for high analysis statistics ability and data management system on the graphic areas which contained of descriptive menu and interactive dialogue box. SPSS stands from statistical product and service solution. It is a kind of Windows program to process the input of the data. This program consists of structure of the data, entry of the data, save of the data, and analyzing of the data and this program is easy understood.

1. Structure of data

This data is the description of each data in detail stated by Ratna, the structure of data is used to determine the variable: namely of students, class, Pre-test, and Post-test (2002: 22).

2. Entry of data

Data entry is done by choosing view of data then entry those data completely based on each variables.

3. Save of data

After entry the data and structure the data, then the data will save in SPSS program.
4. Analyzing of data

The researcher uses Paired Sample T-test to analyze the data. Paired Sample T-test is program to process the data which have two samples. The researcher uses this test because it is appropriate in these tests, as a result of Paired Sample T-test is used in knowing the result of the data.

The data consists of mean, median, standard deviation, correlation, maximum and minimum (Browman, 1999:17).

As a result of using SPSS for windows program, the statistics calculations and all descriptions are shown in the next chapter.

F. Data Presenting Method

In presenting the data, the researcher used the quantitative approach to analyze the data. The quantitative analysis is an analysis the data based on the numbers and statistics calculation. Through this approach, the researcher will get accurate and valid of the data. It is accomplished some tables, frequency and diagrams to describe the analysis results based on the data finding. The data presenting method in this research belongs to non-formal method. Hence, in presenting the data, the researcher described the data in ordinary way. In order to get clear perception, the researcher also uses qualitative approach to give some information to interpret some tables, frequency and diagrams. It gives short explanation and description based on quantitative approach.