CHAPTER III

RESEARCH METHOD

This chapter present the research method. It focuses in the method used in conducting this study which covers (1) research design, (2) population, sampling, and sample, (3) subject of the study, (4) variable data, (5) data and data source, (6) validity and reliability testing, (7) data collecting method and instruments, (8) technique of data analysis, (9) hypothesis testing.

A. Research Design

Research may defined as the application of the scientific approach to the study of a problem. It is a way to acquire dependable and useful information according to Choyyimah (2011), research is an attempt to solve the problem or some problems by using scientific approach in a systematic way.

Before conducting research the researcher should identified what the kind of the research, and need to make planning how the research will be conducted. Because of that, the researcher need to decide the research problem.

This research used quantitative approach, with quasi experimental design. Experiment study is a scientific investigation in which an investigator manipulates and construct one or more independent variables and observes the dependent variable or variables for variation concomitant to manipulate of the independent variables. Experimental research can be done in laboratory, in the class, and in the field. In this study, the

experimental research has been done in the class with taking students population.

The researcher uses Quasi experimental design to find out the effectiveness of LRD strategy to improve students' reading ability. Quasi Experimental Research is defined as "experimental design with conducted if it is look like the real situation". As Ary (2010:640) states Quasi Experimental Research design is in which the investor can control the treatment and the measurement of the dependent variable but cannot control assignment of the subject of the treatment.

In this quasi experimental design, the researcher will evaluate the experimental group before and after giving a treatment. Meanwhile, the other class stand as control group and isolated from the treatment. In other word, control group is not any given treatment. Finally, the researcher compares the influence of the treatment toward an experimental class. The research design in this research can be seen in the diagram below:

O1 → X → O2
O3 → … → O4

O1: Pre-test before giving treatment for experimental group

O2: Post-test after given for experimental group

O3: Pre-test for control group

O4: Post-test for control group

B. Population, Sampling and Sample

A population consist of an entire set of subject, observation, or scores that have something in common. Arikunto (2006: 130) in Encyclopedia of Educational Evaluation population is a set (collection) of all elements processing one or more attributes of interest.

Population is defined as overall object of research target. The population of this research are all the first grade students at SMAN Ngunut, which consist of four natural science classes and four social science classes. The researcher chooses purposive sampling technique to determine the sample. Therefore, in this study the researcher choose the science 3 class as the experimental group which consist of 36 students. Meanwhile, science 4 class which consist of 36 students too will be chosen as the control group. Science 3 class is taken because among other classes the students of a class has average proficiency.

C. Subject of the study

The subject of this research was the first grade students at Senior High School 1 Ngunut, and the object of this research was to analyze the use of LRD (Listen, Read, Discuss) strategy towards students reading comprehension in narrative text at the first grade students of Senior High School 1 Ngunut.

D. Variable

Variable is the object of the research of the problem which emphasized in research. According to Feankel, Wallen (1996: 51), variable

is a concept a noun that stand for variation within a class of subject, such as gender, eye color, achievement, motivation, or running speed. Variable can be classified in several ways. Two other terms for variable that are frequently mentioned in the literature are independent variable and the dependent variable.

In this study, there two kinds of variable that are independent variable and dependent variable. Independent variable is a variable which influence the dependent variable. This variable is selected and manipulated by the researcher. Therefore, the independent variable in this study is LRD strategy. Meanwhile, dependent variable is a variable that is consequence of or dependent on an antecedent (independent) variable. This variable is observed and measured in order to know the effect of independent variable. Thus, the dependent variable in this study is the student's reading comprehension.

E. Data and Data Source

The term data is defined as recorded factual material commonly retained by and accepted in this specific community as necessary to validate research findings. In the other word, data is an information in raw or unorganized from (such as alphabets, numbers, or symbol) that refer to or represent, condition, ideas, or subject. Whereas, data source is subject where the data acquired or collected. The data in this research is quantitative data with the numeric form. Because the data will be taken from the students' score from the result of the students' pre-test and post-test.

In order to know whether there are significant differences between students who are taught using LRD strategy and those who are not. The researcher uses the data sources from primary data that are collected directly from the sample. In conclusion the primary data sources of this research are taken from students test during pre-test and post-test both experimental and controlled group.

F. Validity and Reliability Testing

Researcher is always dependent upon measurement. There are two important characteristics that every measuring instrument should go through a process of validity and reliability check.

1. Validity

   Heaton (1988: 159) states that the validity of a test refers to appropriateness of a given test or any of its component parts as the measure of what it is purposed to measure. Itmeans the test will be valid to the extent that is measured what it is supposed to measure.

2. Reliability

   Reliability is the degree to which a test consistently measures whatever it is measuring (Gay and Peter, 2000:169).

G. Research Instrument and Method of Collecting Data

The researcher will use test to collect data from the students. Test is a method that used to measure a person's ability or knowledge. The researcher can look at the scores and indicate what subject that has the characteristic

being measured. In here, score as the indicators, construct of interest in large part a function of the objectivity, validity, and reliability of the test. The test here will done before and after treatment, but before giving treatment to the subject, the researcher should conduct try out. And the purpose of the try out is to obtain validity and reliability of the test. It was determined by finding the difficulty level of each item.

a. Pre-test

   Pre-test is a test which is conducted before given a treatment to the students. It is given to both experimental group and control group. Pre-test is administrated to know the students reading skill overall.

b. Treatment

   After giving pre-test, the experimental group is given a treatment by using LRD strategy to teach reading. Meanwhile, the control group is not given the treatment.

c. Post-test

   After the treatment, the researcher conducts the post-test in order to know or to measure the students' reading ability after the treatment. Post-test is administrated to know whether there is significant difference before and after the treatment.

H. Technique of Data Analysis

After collect the data from the students score. The researcher will review the data. Data analysis is how the researcher interpret, calculate, verify, and grouping the data systematically. The data score from the experimental group will be compared with the students score from the

control group in order to measure the significant different on the students reading ability with taught by using LRD strategy. In this case, the researcher uses SPSS 20.0 to analyze the data statically.

I. Hypothesis Testing

The data analyzed statically to see the *p*-value is less than or equal to *a*, then the null hypothesis is rejected. It means that there is any significance different on the student reading ability between taught using and without using LRD strategy. However if *p*-value is greater than *a*, the null hypothesis is not rejected. It means that the alternative hypothesis accepted and there is no significance different on the students' ability between taught using and without using LRD strategy.