CHAPTER III

RESEARCH METHOD

A. Research Design

Research design is the way to collect data by deal with the research questions. This study uses the quantitative research with experimental research design. According to Emzir (2012,p.63) pointed out; the experiment study is there search method that can test hypothesis based on causa relationship(cause-effect). The writer choose experimental research design because it involves a study of the significant result systematic manipulation of one variable on another variable. In this study the writer want to know the improving students through observation and test.

Type of experimental research design that will be used quasi-experimental research design. In quasi-experimental research design is similar to experimental research but is not exactly that. The difference between the two the assignment of a control group. In this research design an independent variable is manipulated but the participants of a group are not randomly assigned as per conditions. The independent variable is manipulated before calculating the dependent variable and so directionality problem is eliminated It means that in quasi-experimental research design there are two group is as control group. The writer will give pre-test and post-test for both group. The difference between them, the experimental group can be giving treatment before post-test.

In this study, the researcher applied quasi-experimental with non-equivalent control group design. Sugiyono (2017: 116), writes that a Nonequivalent control group design is a design that includes two groups experimental group and control group. Both the experimental group and control group had pre-test and post-test designs. There searcher gave different treatments to the two groups. The experimental group was treated by YouTube videos and the control group was treated by teacher spoken utterances as the conventional listening learning.

The population of this study is only 34 students consist of 2 classes namely experimented class and control class. The population is defined as a collection of all the possible objects, people, or scores of a particular type (Miller, 2005: 53). Regarding the total a number of population, the researcher took two classes as the samples; experimental and control group .To determine the samples of the study, the researchers used the total sampling technique due to all of the population were used. The research instrument used for data collection was a listening test. Willson (2008:170) writes there are many kinds of listening tests including text with the question (the learners have a list of multiple-choice questions in front of them while they listen to a text being read or a recorded dialogue). The researcher used this kind of listening test since it was commonly applied to the students.

B. Population, Sampling and Sample

1. Population

Population in this research is all students at ninth grade SMPN of 3 Kedungwaru 34 students consist of 2 classes namely experimented class and control class.

2. Sampling

Researchers use purposive sampling because the researcher determines sampling by determining specific characteristics that are in accordance with the research objectives so that they are expected to be able to answer research problems. Their attitudes are expected to have characteristics such as being good, active in class, and almost having the same average ability. The academic records of students from both classes had the same grade and average. So, these two classes belong to the normal class which means that they tend to develop when given the YouTube Video treatment and conventional methods.

3. Sample

In this research, the researcher take two class as the sample of the research. There are IX A as the control class and IX B as experimental class. The samples are 34 students.

C. Method in Collecting Data

In conducting this research the procedure of data analysis would be collected from result pre-test, treatment and post-test result. After collecting the data, the researcher did some steps in analyzing the data. After the writer collecting the data, the data from all test from this research was setting up in the frequency distribution which is analyzed by mean. Its statistic formula, suggested by Hady (2003, p.272).This is the classification of minimum completeness of the data and also the mean:

Table 3.3.

Score	Value	Category
90-100		Excellent
80-89		Very good
65-79		Good
55-64		Enough
0-54		Bad

The mean (M):

$$M=\frac{\sum x}{N}$$

Explanations:

M=Mean

∑x=Sum of score

N=Number of sample

Then to find out the differences between pre-testand post-test is significant the reseacjer used the following T-score formula as suggested by Bunging (2005:191):

$$t=md$$

$$\frac{\sqrt{\sum d^2}}{N(N-1)}$$

Explanations:

Md : D divided byN

D : Score treatment I-score of treatment II

N : Number of Sample

This research will be conduct at the ninth grade students of SMPN of 3 Kedungwaru. Moreover after the researcher giving treatment to the students in several meeting, the writer will collecting all the data needed from the result of pre-test and post-test. First of all the researcher will be analyzing the pre-test and then post-test.

1. Analyzing Pre-Test

In analyzing pre-test the researcher will use testing technique to measure students' ability. The test is in the form of written text multiple choices and essays. Every technique has each the advantages and disadvantages. The multiple choice is the test that focused on objective side of thinking, meanwhile, essay focused on subjective point of view; the students can express their idea related to the test got. Both of test used, hopefully completing in measuring the students ability.

2. Analyzing Post-Test

In analyzing post-test the writer will be compare between pre-test and post-test which have higher score. Then the researcher also classify the result of any significant improvement of the both test. In the post-test the researcher will give test to students in the form of written text, multiple choice and essay related to Procedure Text.

D. Validity and Reliability

There are two aspect that will be measure dis Validity and Reliability.

1. Validity

Validity refers to the degree to which a study accurately reflects or assesses the specific concept that there searcher is attempting to measure. This study investigated the validity of various approaches to measure of component skill.

a. Content Validity

Content Validity is based on the extent to which measurement reflects the specific intended domain of content. In content validity the writer aim to study English listening learningThis testing is used continuous data and discrete data. It is suitable for parametric statistics, which is to know the correlation degree between two variable in normal distributed. The test could be valid that it would measure the instrument and appropriate with the instruments. When students will give a pre-test and post-test,as students should be do the test. The researcher would measure through pre-testand post-testto know how the way students learningat the school.

b. Face Validity

Unlike content validity, face validity does not depend on established theories for support (Fink,1995).Face validity is indicate to the writers' instruments appear will measure that the researcher measure. This validity to know the instruments that will give to students. The instruments give to the students 10 numbers of essay questions to measure the students' listening comprehension ability. Furthermore, there are 15 questions of multiple choice. Before answer the questions, students will be gave four videos relate to procedure text, they are How to Make Classic Philly Cheesesteak Sandwich, Clean With Me: Messy Bedroom Clean Out, How to Use an ATM in English and Understand Native English Speakers with this Advanced Listening Lesson.

c. Construct Validity

Construct validity seeks agreement between a theoretical concept and aspecific measuring device or procedure. Construct validity that is instruments which design to certain measure.

E. Method of Data Analysis

This study is experimental study that investigates improving students' listening ability through YouTube videos and test in ninth grade at SMPN of 3 Kedungwaru. Thus, the purpose of this study is to know whether the use of YouTube videos in Procedure Text gives the significant result on the students' listening ability or not. Then the method analyze the data in study is by using calculating data in SPSS using statistical formula.

Data of the study were collected by firstly giving the same pre-test to both groups (experimental group and control group) before conducting the treatment As the treatment was conducted, a post-test was subsequently administered to both groups. Data collected were then analyzed by using SPSS 25 and used t-test to compute the data derived from two samples. In identifying whether or not applying YouTube videos gave a significant effect on students' listening comprehension performance, the researchers compared the result of the t-test with t-table. If the t-test $\geq$ t-table, the alternative hypothesis would be accepted which means that applying YouTube videos gave a significant effect on students' listening comprehension performance. If the t-test $\leq$ t-table, the

null hypothesis would be accepted which means that applying YouTube learning videos did not give a significant effect on the students' listening comprehension performance.

2. Reliability

Reliability is the extent to which an experiment test or any measuring procedure yields the same result on repeated trials. Without the agreement of independent observers able to replicate research procedures, or the ability to use research tools and procedures that yield consistent measurements researchers would be unable to satisfactorily draw conclusions formulate theories or make claims about the generalizability of their research. In this study the writer measure the score of realibility testing with the use of Alpha Cronbach. The test called reliable if there is no far distance of the result of the researcher is reliable or not, the writer testing the students twice minimally to conducted there search with the same condition and time.