CHAPTER III

RESEARCH METHODOLOGY

The purpose of this research is to describe the method used to conduct the research and the subject that was study. This study was in line with the rules and procedures. This chapter explains the research design and type of the research, place and time of the research, target research, variable of the research, research procedure, data collection technique, instrument of the research, and data analysis technique.

3.1 Type and Design of The Research

The type of this research is descriptive quantitative research because it compares the numbers in the form of result of the test by using hypotheses with direct method on eleventh graders of mia-2 in SMA Muhammadiyah 10 Surabaya. Then, this research describes the results of data from student activities, completeness of student learning outcomes and student responses.

3.2 Research Design

The research design is the design of how the research is carried out. Research design used in this research is one group pretest posttest design. In this design, before the treatment was given first the sample was given pretest and at the end of the sample study was given a post test. This design used in accordance with the goal to be achieved to know the effectiveness of using YouTube as a listening learning media with problem-based learning.

This is the research design that used in this study:

Pretest	Treatment	Posttest
01	X	02

Descriptions:

01: pretest that given before treatment

02: posttest that given after treatment

X: treatment of the research

3.3 Place and Time of The Research

This research was conducted exactly in SMA Muhammadiyah 10 Surabaya and the time of the research conducted was in the even semester of the academic year 2018 which took place in April until May 2018.

3.4 Target Research

The population of this research was the eleventh grades of mia-2 female class that was consisted of 24 students at SMA Muhammadiyah 10 Surabaya.

3.5 Variable of The Research

There are two variables that the researcher separated into:

3.5.1 Independent Variable

"Independent variable is an attribute which influences dependent variable". (Creswell, 2012:116) Based on the theory above, the researcher sets jigsaw with YouTube as media that will give good effect to the students' listening skill as independent variable

3.5.2 Dependent Variable

"Dependent variable is an attribute which is influence by independent variable" (Creswell, 2012: 115). Based on the theory above, the researcher sets students' listening ability as dependent variable.

3.6 Research Procedure.

This research has 3 procedures that must be done such as:

3.6.1 Stages of Preparation.

Before doing the research, the researcher did some activities as following:

- 3.6.2 Make an observation to the school that will be used as a place of research.
- 3.6.3 To find out the test's results of learning.
- 3.6.4 Preparing the research instruments which consist of student activities, observation sheets, teacher observation sheets in managing learning, student response questionnaires, and test results of learning outcomes to determine the completeness of student learning outcomes. Before the research instruments are used in the learning activities, the researcher consulted them to the supervisor.
- 6.6.5 Preparing the Lesson Plan (RPP), discussion media and key of discussion sheet. All learning devices are made by the researcher and have been consulted by the lecturer and the teacher.
- 6.6.6 Make deals with teachers including:
- 6.6.7 The material that to be studied.
- 6.6.8 Time allocation.
- 6.6.9 Researcher acts as teachers in this research.
- 6.6.10 Stages of implementation.

The research process conducted in three meetings. In the first meeting conducted to try out the class, diagnose test used to diagnose how far students' English skills. In the second meeting, the researcher implemented pretest to know the result of student learning and gave treatment to the students, the steps are adjusted to the lesson plan (RPP) that has been approved by the supervisor, observed the student activity and the ability of the teacher to manage the learning when the learning process takes place. In this study required an observer at the third meeting, the

students were given posttest and student's response questionnaire to get the students' learning result also student's completeness data.

3.7 Data analysis technique

After all the respondents completed and fill their answer, the researcher collected the data which aims to calculate the data from the questionnaire, the researcher used T-Test to know the result and to determine what the effective media that can improve students listening skill. Furthermore, the researcher identified the students about the use of YouTube as media.

3.8 Data Collection Technique.

For collecting data, some actions were taken, such as:

3.8.1 Implementing Diagnostic Test

Diagnostic test is general English test that given to the student which aims to categorize into three of group level, it is high group level, middle group level and low group level. This test is conducted during teaching and learning process:

3.8.2 Doing Class Observation.

This method of the observation contains of the data which describe the learning activities in the classroom, both teacher activity and student activities.

3.8.3 Giving Test

Researcher collected data from pretest and posttest, it provides pretest to know the listening ability of students before treatment, then do posttest to measure students' competence in improving skill.

3.8.4 Giving Questionnaire

This questionnaire contains written questions that are used to obtain data about the effectiveness of YouTube as a media in learning listening and to find out how students respond of using YouTube in teaching listening.

3.9 Research Instruments

The instruments that were used in this study are as follows:

3.9.1 Student activity observation sheet

Student activity observation sheets are used to obtain data about student activities during the learning process with the category that has been determined.

3.9.2 The observation sheet of teachers' ability in managing learning

In this research, the researcher as teacher followed steps of lesson plan (RPP) which has been made by the researcher herself, and consulted to the supervisor. This observation sheet is used to know the success of teachers in managing listening learning during the learning process.

3.9.3 Questionnaire of students' response

Questionnaire of students' response was prepared by the researchers to obtain student response data on listening activities using YouTube.

3.9.4 Pretest and posttest

The pretest problem is used to obtain data on the completeness of the students' learning outcomes that implemented at the beginning of the lesson. For the posttest is used to obtain data on the completeness of student learning outcomes implemented at the end of learning. Researchers make their own pretest and posttest questions according to the material that given by the teacher.

3.10 Data Analysis Technique

The purpose of data analysis was to know the effectiveness of YouTube as media to teach listening on factual report text in eleventh grade students of SMA Muhammadiyah 10 Surabaya in academic year 2018. After collecting all of the data,

the researcher analyzed and discussed the result of the pretest and posttest by using Excel. To analyze the data from the test, then the researcher conducted some steps:

3.10.1 Validity

Creswell stated that validity is an important key to effective research. So, the validity that used in this research was content validity. The content is valid if the test gets appropriated scores and students understood more about the content which has been given. The test was arranging based on curriculum that used by school, it is curriculum of 2013. The material of the test should be appropriate with the material that the English teacher has given. The validity instrument was taken from the eleventh grade syllabus of 2013 curriculum.

3.10.2 Normality

Normality test that used to find out the data distribution is in normal distribution or not. The calculation of the data is using the formula that appropriate with criteria of testing normality, the decision criterion in the normality test on SPSS is if the significance value is greater than 0,05 then the data is normally distributed. In this research is uses SPSS 17 with formula of the One-Sample Kolmogorov-Smirnov Test to measure the normality of the test.

To check the data is normal or not, the criteria of testing normality is if p (value) $> \alpha$ (sig 0.05) so that H₀ is accepted. However, if p (value) $< \alpha$ (sig 0.05) so that H₀ is rejected as stated in Susetyo (2010: 145):

H_o= the population is normally distributed

 H_1 = the population is not normally distributed

3.10.3 T-Test

The purpose of this test is to analyze the differences result of the student's listening skill before and after using YouTube as media, the researcher used a T-Test through SPSS 17 to analyze the data.

Hypothesis:

H₀: Both of the average pretest and posttest values are the same (pretest and posttest values are unchanged)

H₁: Both of the average pretest and posttest values are not the same (pretest and posttest values are not the same or there is a difference)