**CHAPTER III**

**RESEARCH METHOD**

This chapter discusses about the method used by the writer in conducting the present research. The discussion includes research design, population, place and time of research, variable, data and data source, data collecting method and instrument and data analysis.

**A. Research Design**

 Research design is the researchers` plan of how to proceed to gain an understanding of some groups or some phenomenon in its natural setting. The design begins with a general statement of a research problem or topic. The beginning researchers needs to think about some topic in which he or she has an interest and wants to know more about it (Ary,2002:426).

 According to Burgin (2005:84) research design is all process that be needed in conducting the research. It means that be the process includes planning and doing the research.

 In this study the researcher uses experimental design with quantitative approach. The research design, the writer chooses it because this design has a purpose to find out the differences between before and after being taught by using motion pictures. According to Best (1981:57) “experimental research is a research to know the possibility influence caused and effected by applying one or more certain condition to one or more experimental groups”. This study use quasi experimental design with two groups pre-test and post-test, because this study about the experimental group as the students` achievement in vocabulary after being taught by using motion pictures and the control group as the students` achievement in vocabulary before being taught by using motion pictures. In this research, randomized pre-test and post-test used by the researcher are assigned to the experimental and control groups. Two groups were determined by purposive sampling. One group was treated as the experimental group and received the treatments. The other one was treated as the control group and not receive the treatment. The experimental group was taught vocabulary by using motion pictures and the control group was taught vocabulary without by using motion pictures. In the vocabulary teaching learning process, motion pictures were used as media of teaching audio visual aids. After the treatments given to the experimental group, post test of vocabulary was given to both experimental group and control group.

**B. Object of the Study**

 In this research, the researcher chooses the fourth year students of SDN 2 Sawahan-Trenggalek as the object of research, because the researcher wanted to know the students` achievement before and after being taught by using motion pictures.

**C. Population**

 A population is defined as all members of any well-defined class of people, event or object. According to Louis (2005:45), “population is the object that has some qualities and characteristic that is chosen to be cleared and to be concluded by the researcher. The target population in the present study is all the fourth year students of SDN 2 Sawahan-Trenggalek. The total number of fourth year students at SDN 2 Sawahan-Trenggalek are 50 distribute in two classes they are consist of 25 students in IV-A class as the experimental group after being taught by using motion pictures in vocabulary and consists of 25 students in IV-B class as the control group before being taught by using motion pictures in vocabulary.

**D. Variable**

 A variable is an attribute that is regarded as reflecting or expressing some concept or construct (Ary, 2002:31). In addition, variable is divided into two group, they are independent variable (x) and dependent variable (y). There are two kinds of variable in quantitative research:

 1. Independent variable is the conditions or characteristics that the experimenter manipulates in his or her attempt to answer their relationship to observed phenomena (Best, 1981:59). Here, the independent is the uses of motion pictures.

 2. Dependent variable is the conditions or characteristic that appear, disappear or change the experimenter introduces, removes, or changes independent variable (Best, 1981:60). Here, dependent variable is the student`s scores on the vocabulary test. It will be known the result of the treatment, if there is any effect on the student`s achievement in vocabulary.

**E. Place and Time of the Research**

 In this study, the research took place in SDN 2 Sawahan located in Sawahan-Trenggalek and the research was conducted on May 17th up May 31th. In this time, the research introduces in front of class and to teach the fourth year students four meetings in this elementary school.

**F. Data and Data Source**

 1. Data

 The data are very significant in the research. The research will not to get information without the data. In this study the researcher used quantitative data. This data was used to know the student`s achievement in vocabulary before and after being taught by using motion pictures. In this research, the researcher used primary data is the data collected by individual or organization though the object directly. In this study the primary resource of data is students` scores of the fourth year students at SDN 2 Sawahan-Trenggalek.

1. Procedure of collecting data

 After the research had got permission from headmaster, the research was conducted on May 17th at SDN 2 Sawahan-Trenggalek. The procedures were:

1. The researcher came to the classroom to observe the teacher and students activities in teaching vocabulary.
2. The researcher gave the pre-test to determine which class to be experimental group or control group. Experimental group is to prepare some tool for treatment. Experimental group using motion pictures and control group without using motion pictures. The duration for every class was same, and the material is vocabulary.

 b. An experimental typically involves two groups are experimental group and control group. The experimental group (Class IV-A) typically receive of motion pictures as media and a treatment under the investigation while control group (Class IV-B) receive a different treatment.

 c. The researcher gave treatment by using motion pictures as media and the material is vocabulary it is experimental group. The control group was tried without using motion pictures as media. The researcher gave the pre-test and post-test four times and the duration of treatment for every class was same.

 2. Data Source

 Data source is subject in which data is gotten. In this cases researcher effort to get data from the subject is something people, term which data variable is. In this research the subjects were the students of fourth year at SDN 2 Sawahan-Trenggalek.

**G. Data collecting method and the instrument**

Instrument has important function in this research using an instrument is one of the significant steps in conducting this research. The main instrument used in this study is test. In this study, the researcher also used test to collect data.

 1. Test

 According to Arikunto (2010:13) test is draft of question used for know the skill, intelligence and ability of individual of group. It can be said, that test is series of questions, exercise, or other means, which are used to measure the skill and the knowledge, intelligence of a person or a group the knowledge.

 Based on the statement above, it can be concluded the test is method of collecting data by giving the test item to the respondent or in this case the students and the writer does it. The test method in this case is used to get data of student achievement in vocabulary. The test used in the form is vocabulary test. The writer used the multiple choice to test vocabulary, they are:

1. Pre-test

Pre-test is a test that is given to all fourth year students at SDN 2 Sawahan-Trenggalek. To measure their ability before treatment process, this test was given to know the basic competence for 25 students and to know their earlier knowledge before they get treatment. Before treatment is a test which was done to measure the student achievement in the first time. Pre-test was done before treatment process. Pre-test was given to the experimental group and control group with the some test and the material about vegetables and foods. It is to know the achievement to the student. The score were analyzes to determine the students` scores between pre-test and post-test. The respondents were asked to do the question of vocabulary. Time location of the test is 60 minutes. This kinds of test is 20 multiple choices. The pre-test format for control group held May17th and the experimental group May 24th. They were 25 students for control group and 25 students in experimental group.

1. Post-test

Post-test is a test that is given to all fourth year students at SDN 2 Sawahan-Trenggalek. To measure their ability after treatment process, this test was given to know the basic competence for 25 students and to know their earlier knowledge after they get treatment. It is done to know the final score and to know the students, difference competence before and after they get treatment.

Treatment here means that the researcher applied motion pictures as audio visual media in teaching vocabulary. The processed of student`s achievement begin with class presentation. The presentation should cover the opening, development, practice components of the teacher total lesson. On the first day of student`s achievement, the teacher give the test. The two classes are treated with different teaching model. The materials in this study are fruits and animals. The experimental group was taught by using motion pictures while in the control group was taught without using motion pictures in teaching vocabulary.

Test after treatment is a test which is done after teaching process was done. The researcher only used one class, therefore the group as a control and experimental group got one post-test. A post test was given in order to know the scores of the students after they were taught by using motion pictures and taught without motion pictures.

The post test consist of 20 multiple choices. Time allocation of test is 60 minutes. This test was used to measure the student`s achievement after they were given treatment. The post test format for control group held on April 31th and the post test for experimental group is May 2th.To knows the good test is all good test posses two qualities are reliability and validity.

Validity is defined as the extent, to which as instrument measure, which is supposed to measure. It means that a valid test of subject would measure the subject itself and not other than it. If a test has construct validity, it is capable of measuring certain specific characteristics in accordance with a theory of language behavior and learning. This type of validity assumes the existence of certain learning theories. Content validity was applied in this research.

The reliability of the test refers to the consistency of the test results whenever they are giving to the test. A test is reliable if it measures consistency and states when the test valid, it must be reliable (Arikunto, 2006:56).Based on the idea above, this test was considered to be reliable because it was constructed based on the content validity. Therefore, the test reliability was not established in this research.

**H. Technique of data analysis**

 The writer used a test to collect the data. After collecting data, they were processed with the following procedures: firstly, coding was giving the code for certain data such as A and B it would be easier in examining the answer. Secondly, scoring, the writer gives the score for the students` work based on the correct answer that the students make. Thirdly, tabulating was after scoring the student`s works, the data will be classified on the table. Fourthly, processing was accounting processing and analysis data using analytic inferential statistic. And the last make description of the result of accounting in the table (Faizal, 1982:85).

**I. The data analysis**

In the last procedures, the writer used T-test by using statistical program to know the students` achievement before and after being taught by using motion pictures in teaching vocabulary.

According in Arikunto(2002:277) the formula is:

a. 

 Where:

 d = Gain (difference) pre test and post test

 N = Total of subject

 b. The Test

 t = 

 Where:

 

 Standart devitiation eror.

  = Mean of the group 1

  = Mean of the group 2

  Total of subject