

CHAPTER III

THE METHODOLOGY OF RESEARCH

A. The Method of the Research

The method of this study was quantitative method. The design of this study was experimental design. The writer used experimental design of this study to see the effectiveness of animation clips towards students' listening skill in narrative text. According to Millan, the purpose of experimental design is to determine cause and effect between independent and dependent variable. A common situation for implementing experimental study involves several classes or schools that can be used to determine the effect of curricular materials or teaching methods.¹

In this study, animation clips was the independent variable which may cause/effect students' listening skill in narrative text as the dependent variable. The writer used pre-test and post-test on the control and experiment class, to see the effect of animation clips by looking pre-test, and post-test measurement and comparing the gained scores between both classes. The effect can be seen from the improvement of students' score of experiment class in the post-test. The score was taken by the writer after student had been given some treatments and from the comparison of both classes. The experiment class was given the technique by

¹ James H. McMillan, Sally Schumacher, *Research in Education Evidence-Based Inquiry 6th Edition*, (Boston: Allyn and Bacon, 2006), p. 24.

using animation clips in the classroom and the controlled class without using animation clips.

B. Place and Time of Research

In research activity, place is needed as location of research to get appropriate time of opportunity to get the data to examine the effect of using animation clips on listening narrative Text. The writer takes MTs Raudlatul Muta'allimin Sidadung Jl. Raya Cemplang – Cadasari km. 6,5 Sidadung Baros Serang – Banten.

C. The Population and Sample

1) Population

Population as the set of all possible data on the observations recorded by a researcher. In other words, population is a case, situations or individuals who share one or more characteristics.² Another definition mentions that the population is the group of people we want to generalise to.³ A population is commonly understood to be natural, geographical, or political collection of people, animals, plants, or objects. The population of this research is the second grade of students at MTs Raudlatul Muta'allimin Sidadung in academic year 2015-2016.

² Nunan, *Research Method*, 231.

³ Nunan, *Research Method*, p. 15

2) Sample

Research overcome this problem by choosing a smaller, more manageable number of people to take part in their research. this is called sampling.⁴ According to Nunan,“ Sample is subset of individual or cases from within the population.”⁵ Based on the experimental research method, the researcher will use two classes as sample (control class and experiment class). At this research the sample are 46 students, 23 students from class VIII A as experiment class and 23 students from VIII B as control class.

D. The Research Instrument

Every research uses instrument. Research instrument is for facilitating that use by researcher to collect the data. And in this case the researcher uses test as an instrument. The aim of the test as an instrument used by the researcher is to know the students' listening skill. To got the data of student's listening skill, the researcher giving a pre-test before treatment and post-test after treatment.

E. The Technique of Data Collecting

⁴ Catherine Dawson, *Practical Research Method: A User Friendly Guide to Mastering Research Techniques and Projects*, (Magdalen Road: How to Books Ltd, 2002), p. 47

⁵David Nunan, *Research Method*, 232.

The technique for collecting data is the way used by the writer to collect necessary data. The writer used some data collection techniques, are as follows :

1) Observation

Observation were conducted to collect the data about the teacher and students' performance during the teaching and learning process. This study used the focused observation method. This method was chosen because it could refine the judgment about both the teacher and students' activity. The observation were conducted during the treatments applied to the experimental group.

2) Test

The test was divided into pre test and post test. In this research the writer took the result of the test from the students. In collecting the data, the writer does the pre-test and post-test that related to the lesson theme which has taught. The test is multiple choices. Test, in simple terms is a method of measuring a person's ability, knowledge or performance in a given domain.⁶

a) Pretest

The researcher will conduct the pre-test when the first time enters the class. Once only to experiment and

⁶ Brown H. Douglas, *Language Assessment and Classroom Practice*, (San Fransisco: Longman, 2004), p. 3

control class. The type of test that used by the researcher is multiple choice.

b) Post test

Post test also will conduct once for experiment and control class. The post test will give after treatment. It is aimed to know how the improvement of students' ability after treatment.

F. The Technique of Data Analysis

After getting the data from the experimental and the control class, the researcher will uses comparative technique. The comparative technique to evaluate hypothesis concerning the differences between the two examined techniques in teaching listening process by using animation clips and other technique.

The formula is as follows:

$$t_o = \frac{M_1 - M_2}{\sqrt{\left(\frac{JK_1 + JK_2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

The procedure of calculation as formula

1. Determining mean variable X_1 with formula:

$$X_1 = \frac{\sum X_1}{N_1}$$

2. Determining mean variable X_2 with formula:

3. $\bar{X}_2 = \frac{\sum X_2}{N_1}$
4. Determining deviations variable X_1 with formula:
 $X_1 = X_1 - M_1$
5. Determining deviations variable X_2 with formula:
 $X_2 = X_2 - M_2$
6. Determining degree of freedom with formula
 $df : N_1 + N_2 - 2$

Where:

M_1 : mean of post-test of experimental class

M_2 : mean of post-test of control class

$\sum X_1^2$: sum of square deviation in the experimental class

$\sum X_2^2$: sum of square deviation in the experimental class

N_1 : number of students of experimental class

N_2 : number of student of control class

df : Degree of freedom