**CHAPTER III**

**RESEARCH METHODOLOGY**

**3.1 Research Methodology**

**3.1.1 Research design and Methodology**

This research uses quantitative method, and the design of research is experimental research, John W.Creswell Best defined experimental research as the description and analysis of what will be or what will occur, under carefully controlled condition.

In this research the writer uses quasi-experimentalresearch. Quasi-experimental research is applied because the writer is able to control at least one of the most dominant variable of the research, in this case the ability of student’s listening skill. The experimental research is chosen to determine influences an outcome or dependent variable, which is the effect of using English Song in Understanding Listening Comprehension to the students of eleven grades MTS Pembangunan Nasional In investigating the effect of using English Song in Understanding Listening Comprehension , two classes of eightgrades are selected. The first class is used as a control group which does notreceive any treatment and the other class as an experimental group which is taught by using English Song.

**3.2 Objective of the research**

The objective of this research is to find out whether there is a significant difference of students’ achievement in learning listening through English Songcompared to learning listening without using English Song at MTS Pembangunan Nasional Lubuk pakam.

**3.3 Time and place**

The research is held at MTS Pembangunan Nasional lubuk PAKAM , which is located on Jl. Impres , Sukamandi Hilir . Kec. Pager Merbau Kab.Deli Serdang . The research held from February until march 2022.

**3.4 population and sampel**

The “population” consists of all the subjects that will be studied. It includes all the possible cases (persons, objects, events) that constitute a known whole.Sampling is the process of selecting a group of subjects for a study in such a way that the individuals represent the larger group from which they were selected. This representative portion of a population is called a sample. The population of this study is all of the At the eight grade of MTS Pembangunan Nasional Lubuk Pakam in academic year 2021/2022

that consist of 4 classes or 87 students.The sample of this study is selected by using purposive sampling technique. As mentioned by Muijs, in conducting quasi-experimental study, the control and experimental group must be as similar possible as in gender, achievement, or ability.5So, 8A class and 8B class will be the sample in thisstudy. Both of the class have similar characteristics and English score. The experiment class is the 8A class which consists 20 students. and the control class is the 8B class which consist of 20 students. Thus, the total of sample is 40 students.

**3.4.1 Variable of the Research**

There are two types of variables; independent variable and dependent variable. Independent variable refers to a variable that influences the object, while dependent variable refers to a variable that is influenced by the object. They are as follows:

**3.4.2 Independent Variable**

Independent variable is the use of Video - Audio application in learning pronunciation. Video - Audio application is a medium to be used by students to improve the students’ pronunciation

**3.5.Research instrument**

In this research, is used a test as an instrument to collect the information of the students. The test included pre-test and post-test. Nunan states that the group that receives the new treatment is called the experimental group and the group that receives a different treatment or is treated as usual is called control group6. The test was given for both control and experimental groups.

The test is made based on the materials given in the class andcurriculum sylabus. The test items were concerned on the students’ listeningability. The material were taken from the topic of the English song that appropriates to discuss.

**3.6 Technique of Data collecting**

Collecting data is an important thing, and in this research the technique of data collection which is used is: pre-test and post-test, Here is the step of pre-test and post-test:

* 1. Pre-Testthe students of both control and experimental class were given the test, it is called Pre-test. The Pre-test was conducted the testimony forlearning process. The students was given a song which consists of 10 items test questions for blank in English song or essay test after treatment and explanation A pre-test basically measured whether the experimental and control groups were equal. .
  2. Post Test

The post-test was held on the end. Both 8A as an experimental class and 8Bas a controlled class were given the Post-test. the Post-test was given to The experimental class after giving the treatment and explanation. It was given in order to know whether using english song is more effective or not in learning listening comprehension. After having the result of the test, they are scored. The test used close-test which missed some words, it was divided into 20 questions for blank and multiple choice in English song or essay test. This also means that the students’ score will range from zero (when the students could answer the entire question). The highest possible score 100 (when the students could not answer the entire question). Those results are applied as the result of the study. When scoring the students’ worksheet, is the rating as follow:

**Table 3.1**

**the rating scored for listening test.**

|  |  |
| --- | --- |
| **Criteria of Mastery** | **level** |
| 91-100 | Excellent |
| 81-90 | Very good |
| 71-80 | Good |
| 61-70 | Fair |
| 51-60 | Poor |
| Less tthan 50 | Very poor |

**3.7 The Technique of Data Analysis**

After analyzing the normality and homogeneity of the data, the writer calculated the data to test the hypothesis that whether there is significant difference between students’ listening of using english song in listening comprehension in experimental class and students’ listening comprehension in control class. The writer has calculated the data by using t-test formula because the data obtained was normal and homogeneous. T-test is used to know whether English song is effective on students’ listening comprehension. To do hypothesis test, the researcher used t-test formulaadapted from Anas Sudijono.7 Was used.

1. Determining mean of experimental class:

Mx = 

Mx = Mean of gained score of experimental class

Ʃx = Sum of gained score of experimental group class

N1= The total students in experimental class

1. Determining mean of controlled class

My = 

My = Mean of gained score of controlled class

ƩY = Sum of gained score of experimental group class

N2 = The total students in controled class

1. Determining standardeviation of experimental class

SDx =

SDx = Standard deviation score of exprimentel class

Ʃ2 = Sum of squared deviation of score experimental class

N1 = Number of students of experimental class

1. Determining standard deviation of controlled class (Y)

SDy = 

SDy = Standard deviation score of experimental class

Ʃy2 = Sum of squared deviation of score controolled class

N2 = Number of students’of controlled class

1. Determining of standard error mean of variable X:

SEM = 

SEMx = Standard error mean of Experimental class

SDx = Standard deviation score of experimental class

N1 = Number of students of experimental class

1. Determining of standard error mean of variaable Y:

SEM x = 

SEMy  =Standard error mean of controlled class

SDy  =Standard deviation score of cotrolled class

N2 =Number of students of cotrolled class

1. Determining stndard error of different mean of varible X and mean of variable Y, with formula:

SEMx – My =

1. Determining To (T observation) with formula:

T0 =

9.Determining t – table (tt) in significant level 5% and 1% with degree of freedom (df), with formula:

*df*  (N2+Ny) -2

*df*  = Degree of freedom

N1 = The total students in the experimentalclass

N2 =The total students in the control class.

**3.8 The assumption of the hypothesis**

1. If to > tt, the null hypotheses (Ho) is rejected and the alternative hypoteses is accepted. It means that there is significant difference between the students’ listening comprehension score who were taught by using english song who were taught without english song at the eight grade students’ of MTS Pembangunan Nasional (µ1±µ2)in other word, using english song is effective in learning listening comprhension.
2. If to < tt, the null hypottheses (Ho) is accepted and alternative hypotheses (Ha) is rejected. It means that there is no significant difference between the students’ listening comprehension score who were taught by using English song and who were taught without using english song at the eight grade students’ of MTS Pembangunan Nasional (µ1±µ2).in other word, using english song is not effective in learning listening comprehension.