#### **CHAPTER III**

### RESEARCH METHOD

In this chapter, the writer discusses the research method which consists of setting of the research, research design, research method, and subject of study

### 3.1 Setting of the Research

The research was conducted in SMPLB Negeri Jepara which is located at Jl. Citrosomo, No 25, Senenan. Kec. Tahunan Jepara, Kab. Jepara. Prov. Jawa Tengah. This research was carried out for three days, start from July 25<sup>th</sup> 2018, August 1<sup>st</sup> 2018, August 8<sup>th</sup> 2018 in the academic year2018/2019. This study conducts in first semester.

## 3.2 Research Design

The researcher used pre-experimental design. In this design, had experimental class there is a external variable that taken effect on the formation of the dependent variable. The researcher used one group pre-test post-test design, in this design there is a pretest before being treated. Thus the treatment can be determined more accurately, because it can be compared with the situation before being treated. The schema of this model is below:

Table 3.2
Experimental Design

Class	Pre test	Treatment	Post test
VIII C	$O_1$	X	$O_2$

Where:

VIII C: the experiment group

O<sub>1</sub> : observation (pre test )

O<sub>2</sub> : observation (post test)

X : the independent variable or the treatment (using English song)

The impact of treatment =  $O_2 - O_1$ 

(Mubarok, 2015: 99)

### a. Pre-test

Based on Sugiyono (2013:112) giving pretest in research is to know the accuration of the result before giving treatments. Furthermore, Widoyoko (2014:79) said that pretest is done to know the ability of students that related to the material that is aimed to avoid the teacher gives the material that the students have known. Pre-test was given to the sample before they got treatments or in preliminiary study.

#### **b.** Treatment

Treatment is a technique or strategy that was given by the researcher that help the researcher to solve the problem of students in learning process. In this activity, the researcher used English songs as a treatment for helping students in vocabulary in the classroom. In this research, the researcher gave the students treatment with different songs.

#### c. Pos-test

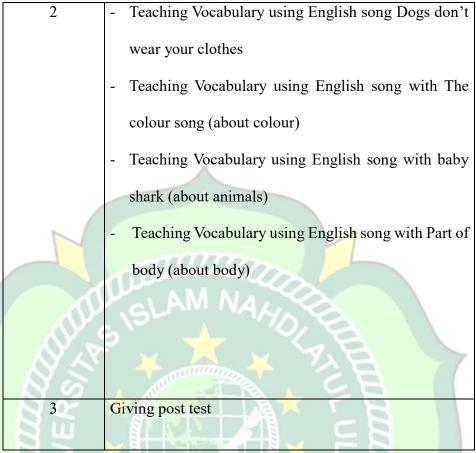
Post-test was given to the sample after gave some treatment. The researcher gave posttest to know the result or the significant differences before they were taught by using English songs as teaching media in their learning activity.

In this research, the students in the experimental class will be taught by using English songs in teaching and learning English as media. The research will be done in three meeting including giving pre test, treatment, and post test. Pre test will be done to collect the data by measuring students performance before received a treatment. This research will consist of three meeting that will describe as in the table below:

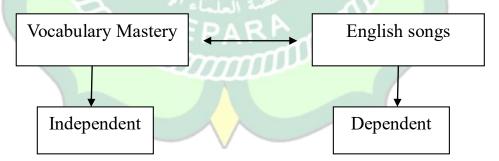
Table 3.2

The process in Experimental Research

Meeting	Experimental Class
1	Giving pre test



There will be two variables which involved in this research. They are vocabulary mastery as independent variable and English songs as dependent variable.



Vocabulary mastery and English songs is different variables. Vocabulary mastery as independent variable and English songs as dependent variable. There are two variables in this research. *Tuna Grahita* Students' Vocabulary mastery is a independent variable and

Using English Song is an dependent variable.

Experimental Class	Meeting 1 : Giving Pre Test	
	Meeting 2 : treatment	
	Activity:	
	1. Teacher plays songs in classroom	
	2. Students sing a song	
	3. Teacher gives word of vocabulary to	
	students	
TITLISL	4. Students remember vocabulary	
DAY X	Meeting 3: Giving post test	

# 3.3 Subject of the Research

In conducting the research at SMPLB Negeri Jepara, the subject of the research was the eighth grade in this Junior High School, the researcher used one group pre-test post-test of pre experimental research. In this class there were 13 students. The researcher used random sampling technique to determine sample, so the researcher took the result based on the sample and generalize the result back to the entire population.

## 3.3.1 Population

According to Sugiyono (2010) in Mubarok (2015:38), population is the generalization of region that consisting of the

objects/subjects that have certain quantity and characteristics defined by the researchers to be studied and the drawn conclusions. Therefore, the population member of this research was the eighth grade students of Junior high school of SMPLB Negeri Jepara the condition related to the size is that a sample must large enough to be representative of the population. The table as below:

Table 3.3.1

The number of Population

No	Class	Students
71. 7	VII C / TUNAGRAHITA	13
2.	VIII C / TUNAGRAHITA	13
3.	IX C / TUNAGRAHITA	18
7	Total	44

## 3.3.2 Sample

According to Mubarok (2015:39), sample is a part of the quality and characteristics of the population. In this research the researcher used one group pre-test post-test. Therefore, this research did not take some of member in the classroom, but it took all of the students (13 students) of the eighth class in this junior

high school of SMPLB Negeri Jepara.

Table 3.3.2

The number of Sample

No	Class	Class	Students
1.	VIII C /	Experimental	13
	TUNAGRAHITA		
1	TOTAL		13

# 3.3.3 Sampling

The researcher used probability sampling. The researcher selection of the sample by means of probabilities is highly in quantitative research. In this research used simple random samples. The researcher taken sample in a simple regardless of the strata and areas that exist in the population which is studied.

## 3.3.4 Techniques of Data Colleting

The researcher used test to collect the data. The test consist of multiple choice questions. The test was given for getting the objectives data of the students' achievement after giving treatments of vocabulary mastery by using English songs. There were two tests which were applied, those were: pre- test and post-test. According to Mubarok (2015:49), data is an important thing in conducting research, in obtaining the data, the researcher must first

determine data collection methods which will be used. In collecting data, the researcher used pre-test and post-test. The researcher applied pre-test and post-test to know the significant differences before they were doing and after doing research and also documentation. In giving pretest and post test the researcher gave 30 questions each meeting. It was by multiple choice questions and coloring draw.

## 3.3.5 Techniques of Data Analysis

To analyze the data, the researcher uses comparative and scientific technique. The researcher using manual calculation of the score from pre test and post test formula. Technique use experiment or pre and post test. The researcher used to found whether there was significant difference between the score of students' achievement in improving *tuna grahita* students' vocabulary mastery by using English songs in teaching and learning English as one group pre-test post-test in pre experimental research. Here is the formula of one sample t-test:

$$\mathbf{t_0} = \frac{MD}{SE_{MD}}$$

a. **M D** means the mean of differences, the writer used this formula:

$$MD = \sum \frac{D}{N}$$

b.  $S E_{MD}$  means the standard error from mean of differences, the researcher used this formula:

$$SE_{MD} = \frac{SD_D}{\sqrt{N-1}}$$

$$SD_D = \frac{\sqrt{\sum}D^2}{N} - \left[\frac{\sum D}{N}\right]^2$$

(Sudijono, 2004:306)

# 3.3.6 Hypothesis of Statistic

The hypothesis of statistic that will be used in this research is:

Ho:  $\psi_1 = \psi_2$ 

Ha : ų₁≠ų₂

Where:

Ho: null hypothesis

Ha: alternative hypothesis

41 : Achievement of students development in Tuna Grahita
Students' Vocabulary Mastery by using English songs in teaching and learning English.

q<sub>2</sub>: Achievement of students development in Tuna Grahita
 Students' Vocabulary Mastery without English songs in teaching and learning English.

the assumption of the hypothesis as follows:

- 1. If  $t_o > t_{table}$  the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. That means there are have a significant difference between the students score using English songs and without using English songs in teaching and learning English.  $(\psi_1 \neq \psi_2)$
- 2. If t<sub>o</sub><t<sub>table</sub> the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. That means there are not have a significant difference between the students score using English songs and without using English songs in teaching and learning English. (ų<sub>1</sub>= ų<sub>2</sub>)