

## CHAPTER III

### METHODOLOGY OF RESEACRH

This chapter discusses the research design and method, the place and time of the research, the population and sample of the research, data analysis of try-out test, method of data collection, method of the data analysis.

#### 3.1. Research Design

Mubarok (2015:2) stated that research is the basic of scientific way to get data for the specific purpose and usefulness. This research used quantitative method where experimental research was needed to gather the data. The aim of the research was to know the answer of the problem statement of the background of the study above. In answering that problem, in doing the research the researcher was used one group pre-test post-test of pre experimental research. According to Mubarok (2015:99), this research study used this formula:

$$\boxed{O_1 X O_2}$$

$O_1$  = Observation (pre-test)

$X$  = Treatment Given (Independent Variable)

$O_2$  = Observation(post-test)

##### 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 preliminary 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 nursery rhyme as a treatment for helping students in listening skill in the classroom. In this research, the researcher gave the students two treatments with different song. The following table was the treatments of this research.

**Table 3.1**  
**Treatments' activities**

Treatment I	Treatment II
<ul style="list-style-type: none"> <li>• Applying song “Five Little Ducks”. The students singing together after the teacher played the song.</li> <li>• Implementing think pair share method. In this method, after the students singing together, the students were discussing the materials in pairs, after that, the students sharing the result of discussion in front of the class.</li> <li>• Giving some questions (fill in the blank). The researcher playing the audio</li> </ul>	<ul style="list-style-type: none"> <li>• Applying song “I Have a Pet”. The students singing together after the teacher played the song.</li> <li>• Implementing games in a classroom activity. The students were divided into some groups. Each group got one animal picture. Then, the researcher playing the song and singing together. After that when the song showed the animal, song was stopped and the group that got the pictures imitated the</li> </ul>

<p>and the students doing the the tasks.</p> <ul style="list-style-type: none"> <li>• Evaluating result of learning activity. The researcher checking the students understanding by saying animals and the students guessing the meaning of the animals together.</li> </ul>	<p>animal song based on the picture on their hands.</p> <ul style="list-style-type: none"> <li>• Giving some questions (fill in the blank). The researcher playing the audio and the students doing the the tasks.</li> <li>• Evaluating result of learning activity. The researcher checking the students understanding by saying animals and the students guessing the meaning of the animals together.</li> </ul>
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### c. Pos-test

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

### 3.2. Setting of the Research

The research was conducted in MI MAMBA'UL ULUM which is located at Mantingan Tahunan Jepara, post code 5941. This research was carried out for four days, start from August 6<sup>TH</sup>, 2018 to August 9<sup>th</sup>, 2018 in the academic year 2018/2019. This study conducts in first semester.

### **3.3. Subject of the Research**

In conducting the research at MI MAMBA'UL ULUM Mantingan, the subject of the research was the 4<sup>th</sup> grade in this Islamic elementary school, the researcher used one group pre-test post-test of pre experimental research. In this class there were 26 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 fourth grade students of Islamic elementary school of MI Mamba'ul Ulum Mantingan.

#### **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 did 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 (26 students) of the fourth class in this Islamic elementary school.

### **3.4. Variables of The Research**

In this research, there were two variables, they were independent and dependent variable. Independent variable in this research was nursery rhymes and dependent variable in this research was students' listening ability.

### **3.5. Method of Data Collection**

The researcher used test to collect the data. The test consist of fill in the blank questions. The test was given for getting the objectives data of the students' achievement after giving treatments of listening skill by using nursery rhymes. 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 posttest the researcher gave 10 questions each meeting. It was by filling in the blank questions.

### **3.6. Data Analysis of Try Out Test**

All good tests had validity. Harris (1969:13) stated that any test that the researcher was used had to appropriate in terms of our objectives, dependable in the evidence it provides. Validity is meant to check the test whether it is related to the skill that measured. The content of validity is designed to measure mastery of a spesific skill or the content of the particular course of study. In this case, the skill that tested by researcher was listening skill, in getting empirical validity, the researcher checked on the actual effectiveness of a test was to determine how test scores were related to some independent. In this research the researcher used content validity, where the validity had done by compared the content of instrument with the content of planning.

### 3.7. Method of Data Analysis

In analyzing the data, the researcher used t-test analysis technique. The technique was used to know the significance of test. It was necessary to calculate the data into the statistic calculation. The researcher used to found whether there was significant difference between the score of students' achievement in improving students' listening skill by using nursery rhymes as one group pre-test post-test in pre experimental research. Here is the formula of one sample t-test:

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

a.  $MD$  means the mean of differences, the writer used this formula:

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

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

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

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

Taken from (Sudijono, 2004:306)