

## CHAPTER III RESEARCH METHOD

### A. Type of Research

This research has been conducted in experimental study in order to test the hypothesis, exactly to find the effectiveness of role play method in teaching speaking. Scott, Usher (2011:61) explained that “Experimental researchers use methods that are essentially deductive and involve the testing of hypotheses”. Therefore, the writer use Quasi Experimental design to answer the research problem as written in the first chapter.

According to Mubarok (2015:90), Quasi experimental designs is the development of true experimental design which is difficult to implement. This design has control group, but cannot function fully to control external variables that affect the implementation of treatment.

In this study, the researcher used time series design where the group is given pre-test three times before given treatment, with the aim to determine the stability and clarity of the group before being treated. Then the result of the pre-test for three times vary, it means that the group is unstable and inconsistent. The process of the study can be presented as in the table below.

**Table 3.1**

The process of Quasi Experimental Research

O1 O2 O3 X O4 O5 O6
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O1 = Pre-test

O2 = Pre-test

O3 = Pre-test

X = Treatment given (independent variable)

O4 = Post-test

O5 = Post-test

O6 = Post-test

## **B. Place and Time of Research** 17

The research has been conducted at MTs Darul Ulum Srikandang which is located on Blimbing Rejo Rt 01 / Rw 03 Srikandang, Bangsri, Jepara. The school has some classrooms, an office, a library, a computer's room and three rest room.

The research was conducted in a month where the researcher divided in three meetings for pre-test and three meetings for post-test with three topics in order to measure the validity of the effectiveness of role play method in teaching speaking.

The researcher conducted pre-test in the first until third meeting. Then, the researcher gave treatment with different topics. After that, the researcher gave post-test three times to be compared with pre-test.

## **C. Population and Sample of the Research**

Population is a unit of the object or subject that has certain qualities and characteristics which are studied by the researcher then be deduced (Mubarok, 2015:31). In this research, the population of the research is the eighth grade students of MTs Darul Ulum Sikandang. There are about 32 students at the eighth grade in VIII A.

Therefore, in this research, the researcher used non-probability sampling. Non-probability sampling is a sampling technique that does not provided equal opportunities for every individual or element or to be taken as sample. Researchers use these technique because they have their specific intention and pugrpose (Mubarok, 2015:38). It means that the writer do not need any type of random selections from a population. In determining the sample, the writer intended to use purposive sampling in selecting the group to be treated. In purposive sampling, the researchers take samples based on the objectives and the specific intent that is predetermined (Mubarok: 2015:40).

The writer took 32 students in VIII A as a population and the population was treated by using role play method in getting the validity of the effectiveness of role play method. The experimental group was given pre-test before being treated and the results of the treatment was determined more accurately, because it compared with the situation before being treated and after being treated.

#### **D. Instruments of the Research**

The instrument has three elements: the first is the degree of the control the researcher exerts over the observational. The second refers to when the focus of the observation is determined; whether, for example: pre-test, flexible or post-test. The third concerns the type of closure involved in the analysis of data (Scott and Usher, 2011:109)

The use of the instrument of the research should be made as appropriate as possible in order to get correct data. For the instrument, this study used test those pre-test, post-test and observation to collect the data.

##### 1. Test

To answer the problem, a test was administered to experimental group while the score relates to teacher's criteria of speaking score that includes pronunciation, grammar, vocabulary, fluency and comprehension based on the oral proficiency scoring categories by Brown, 2001:406-407 as followed:.

**Table 3.2**

#### **Oral Proficiency Scoring Categories**

1. Fluency	1	: No specific fluency description
	2	: Can handle with confidence
	3	: Can discuss particular interest of competence with reasonable ease
	4	: Able to use the language fluently on all levels and participate in any conversation
	5	: Has complete fluency in the language

2. Grammar	<p>1 : Error in grammar are frequent</p> <p>2 : Can usually the constructions accurately</p> <p>3 : Control of grammar is good</p> <p>4 : Able to use the language on all levels</p> <p>5 : Equivalent to that of an educated native speaker</p>
3. Pronunciation	<p>1 : Error in pronunciations are frequent</p> <p>2 : Accent is intelligible though often quite faulty</p> <p>3 : Errors never interfere with understanding and rarely disturb the native speaker</p> <p>4 : Errors in pronunciation are quite rare</p> <p>5 : Equivalent to and fully accepted by educated native speakers</p>
4. Vocabulary	<p>1 : Speaking vocabulary inadequate</p> <p>2 : Has speaking vocabulary sufficient</p> <p>3 : Able to speak the dialogue with sufficient vocabulary</p> <p>4 : Can understand and participate in any conversation</p> <p>5 : Speech on all levels is fully accepted by educated native speakers</p>
5. Comprehension	<p>1 : Within the scope of his very limited language experience</p> <p>2 : Can get the gist of most conversations of non-technical subjects</p> <p>3 : Comprehension is quite complete at a</p>

	normal rate of speech
4	: Can understand any conversation within the range of his experience
5	: Equivalent to that of an educated native speaker

Both the application of test and the scoring of the students' achievement in speaking were administered by the writer. Mubarok (2015: 60) stated that "test is a series of questions or exercises that are used to measure knowledge, skills, intelligence or ability possessed by individuals or groups".

a. Pre-test

In this research, the pre-test was used to find the students' speaking achievement by giving oral test. It was conducted to VIII A class as an experimental group.

The pre-test was done in three times with different topics. The pre-test was given before implementing the role play method (see in appendices 3)

b. Post-test

Afterward, the post-test was done in three times with different topics in order to measure the influences of role play method in teaching speaking before and after being treated in experimental group.

2. Observation

According to Mubarok (2015:52), observation is one of data collection techniques that are very common in qualitative research methods. Observation essentially an activity by using the senses; sight, smell, and hearing, to obtain the information needed to answer the research problems. The results of observations can be in the form of activity, events, objects, conditions or certain atmosphere and emotions of a person.

In this research, the researcher observed the students' activity in the class like the students' participation, students' feeling and active in joining the class. Then, the researcher collect the data of observation to support the result of pre-test and post-test.

#### **E. Technique of Data Collection**

According to Mubarok (2015:28), techniques and tools of data collection must be determined precisely so that the data obtained are valid and reliable. The amount of the data collection is used to decide the variables to be studied. The score of the data was taken by five criteria namely pronunciation, grammar, vocabulary, fluency and comprehension. Then, to get the mean, the scores from all criteria are sum and divided into twenty five based on the oral proficiency scoring categories by Brown.

The procedures of the data collection techniques are presented below:

##### **1. Pre-test**

In this research, the pre-test was used to find the students' speaking achievement by giving oral test. It was conducted to VIII A class as an experimental group. The pre-test was done in three times with different topics. The score was taken by five criteria namely pronunciation, grammar, vocabulary, fluency and comprehension. Then, to get the mean, the scores from all criteria are sum and divided into twenty five.

##### **2. Post-test**

Afterward, the post-test was conducted to measure the influences of role play method in teaching speaking after being treated in experimental group. The post-test was done in three times with different topics. The realization of the post-test is same with the pre-test.

##### **3. Observation**

In this research, the participant observation was applied to collect the research data. Participant observation is data collection method which is used to collect research data through observation where researchers are involved in everyday participant. In this observation, researchers participate in each activity done by subject of the research. By

participating in activities, researchers will observe subject of research in more detail and knowing the meaning of the activities (Mubarok, 2015:53).

The data of observation has been got by joining the activities during the teaching and learning process. It included the students' participation, feeling and condition.

#### **F. Technique of Data Analysis**

Data analysis was used to answer the research question stated in problem statements. The type of data analysis will be depended on technique in collecting the data, for example analysis of interview, observation, test and others. If in the test consists of hypothesis, the writer should examine the hypothesis by using statistical analysis. (Mubarok 2015:28)

According to Mubarok (2015:23), Hypothesis is temporary answer to the formulation of research problems. It is said to be temporary because new answers given are based on theory and not facts. Therefore, research done must have a hypothesis or a temporary answer to the research to be conducted. The hypothesis will be further research to prove whether the hypothesis is true or not true.

In many studies, the hypothesis with such formulation are called Null (zero) hypothesis. Null hypothesis ( $H_0$ ) always represents theories that have been put forward.  $H_0$  is a statement about population parameter that is assumed to be true. This hypothesis becomes a starting point that is used by researcher to test whether the value stated in the null hypothesis is likely to be true. Alternative hypothesis ( $H_a$ ) is an opposite of null hypothesis. It is a statement that contradict a null hypothesis by stating the actual value of population is less than, or not equal to the value stated in null hypothesis. This hypothesis is wrong what we think about null hypothesis.

The data of the study were the scores of the students' speaking test. These scores were collected through pre-test and post-test in order to know the differences of the students' achievement that before and after being taught by using role-play method.

To analyze the data, t-test was used under the following steps:

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

$t_o$  : Test observation

MD : Mean of differences; the average score from the differences gained scores between I variable and II variable, which are calculated with the formula;

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

$\Sigma D$  : Total score between I variable (X variable) and II variable (Y variable).

And D is gained with formula;  $D = X - Y$

N : Number of cases

$SD_D$  : The standard deviation from differences between score of X variable and

Y variable, which is gained with the formula;

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

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

Df : degree of freedom with formula:  $N-1$

### **G. Hypothesis of the Study**

The researcher's hypothesis is there is significant after taught by using role-play method in teaching speaking at the eighth grade of MTs Darl Ulum Srikandang.