CHAPTER III

RESEARCH METHOD

3.1 Design of the Research

The design of this research is experimental study. According to Mubarok (2015:78) states that "Experimental research is a research method used to find specific treatment effect against the other in uncontrolled conditions". Of the many types of the research that might be used, the experiment is the best way to establish cause-and-effect relationships among variables. (Fraenkel, Wallen, Hyun 2012: 265, cited in Mubarok 2015:78).

There are three kinds of experimental research: (1) pre-experimental design, (2) quasi experimental design, and (3) true experimental design. Pre experimental research design is an experimental design that has no control group as a comparison. Quasi experimental research design is an experimental design that the subject of the research is not randomly chosen and there are two groups included. True experimental research design is an experimental design that is taken randomly and there are also two groups compared. (Best 1995: 146-151, cited in Thesis of Nurhayati 2011). In this study, the researcher chooses pre-experimental study. The kind of pre-experimental study is one group pre-test post-test design. In this design, there is a pretest before being treatment. Thus, the results of treatment can be determined accurately, because it can be compared with the situation before being treatment. (Mubarok 2015: 88)

O_1	X	O_2
Pretest	Treatment	Posttest

O_1 : Observation (pre-test)

X   : Treatment given (independent variable)

O_2 :Observation(post-test)

As can be seen in the table above, there is three steps in the experimental design, they are pre-test (O_1), treatment (x) and post-test (O_2). The class was given a pre-test at first time. After that the researcher gave treatment by using wayang golek for three times. The last, the researcher conducted post-post to know the students' score improvement.

3.2   Setting and Subject of the Research

This study will be conducted on Islamic Senior High School of *Mathalibul Huda* which is located at Jepara-Bangsri Km 09 Mlonggo post code 59452. The subjects of this study are the eleventh graders of MA Mathalibul Huda in academic year 2018/2019. XI-IPA 2 was choosen by the researcher as subject of the study.

3.3.   Population

Population is a unit of the object or subject that has certain qualities and characteristics which are studied by the researchers then be deduced (Mubarok 2015: 31). According to Best (1995:13) cited in Nurhayati (2001:32), a population is any group of individuals that have one or more characteristics in common that are interesting. In this study, the population was the eleventh graders of MA Mathalibul Huda Mlonggo Jepara in the academic year 2018/2019. There were seven classes, each class had 30 students. So, the total of population was 210 students.

3.4   Sampling

Arikunto (2002:109) argues sample is a part that can represent all the population observed. According to Mubarok (2015:34) sampling becomes the most important thing in the process of quantitave research because it will determined how high the level of the validity of research result. The sample of this research is XI-IPA 2 which has 34 students. The students are the participants during the research activities.

3.5 **Sampling Technique**

There are two kinds of sampling technique, namely probability and non-probability sampling technique. In this study, the researcher used non-probability sampling technique. The kind of non-probability sampling technique is purposive sampling. Mubarok (2015:40) stated that in purposive sampling, the researchers take samples based on the objectives and the specific intent that is predetermined. In MA Mathalibul Huda, there were seven classes at second grade. The researcher choosed XI-IPA-2 as the sample of the study.

3.6 **Variables**

Brown (2004) states "Variable in the simplest term that is something that may vary or differ". Brown also elaborates that there are two types of variable, the independent variable and the dependent variable. According to Best (1995:137), "variables are the conditions or characteristics that the experimenter manipulates, controls or observes." In this study, there were two variables included, namely dependent and independent variable.

The dependent variable (Y) was the condition or characteristics that appear, disappear or change as the experimenter introduced, remove or changes independent variable. In this study, the dependent variable is the ability of students speaking skill.

The independent variable (X) was the conditions or characteristics that the experimenter manipulates or controls in his or her attempt to as certain to their relationship to observed phenomena. According to Best (1995:137), "In educational research an independent variable may be a particular teaching method, a type of teaching material, or an attribute such as sex or level of intelligence." Then, in this study, the independent variable was the use of *wayang golek* in teaching javanese folktale.

3.7 Research Activities

a. **Pre-test**

Pretest was conducted on July 24 th 2018. First, the researcher came to the class and explained what they were going to do. Then, the researcher gave them a situation to perform in group (because the population of the class is large) and asked the students to perform javanese folktale one by on. In the same time, the students' activities.

b. **Treatment**

The researcher taught using *wayang golek* as the treatment. The first treatment was given on July 28th 2018, the second treatment was given on July 29th 2018, and the third treatment was given on August 30th 2018. The material of the treatment were: Lutung Kasarung, the Legend of Roro Jonggrang and Joko Tarub with Seven Angels.

c. **Post-test**

Post-test was conducted after treatments. Here, the researcher asked the students did the same activities with the pre-test. The students were given the same theme of situation. The post-test was conducted to know if there was the different score that achieved after giving the treatments. The post-test was conducted on August 30th 2018. Here the table of research schedules

No	Research Activities	24 July 2018	28 July 2018	29 July 2018	30 July 2018	30 July 2018
1	Pre-test	■				
2	Teaching Using *wayang golek*		■			
3	Teaching Using *wayang golek*			■		
4	Teaching Using *wayang golek*				■	
5	Post-test					■

3.8   Technique of Data Collection

To collect the data, the researcher used three techniques, they were : pre-test, post-test and observation journal.

in this study, the test consist of pre-test, treatment and post-test. Pre-test was conducted to know the students' speaking skill at first time. Treatment was done to make a change in the process of teaching speaking and making improvement of students' speaking skill (the researcher used *wayang golek*). Post-test was applied after the researcher does the treatment to get the improvement ofstudents' speaking skill. The result showeed after the researcher did the post-test for students.

Observation journal had function to know the students respond and participation during the research activities in the classroom. The researcher analyzed the different conditions between teaching using *wayang golek* and not.

Then to assess students' speaking skill in performing Javanese Folktale, the researcher will use scoring rubric from Haris (1969) and Brown (2004) cited in Nurhayati's Thesis (2011:46).

Pronounciation	4	Always intelligible, though one is conscious of a definite accent.
	3	Pronunciation problems necessitate concentrated listening and occasionally lead of misunderstanding.
	2	Very hard to understand because of pronunciation problems. Must frequently is asked to repeat.
	1	Pronunciation problems so severe as to make speech virtually unintelligible.
	4	Occasionally makes grammatical and/ or word order errors which do not, however, obscure meaning.
	3	Makes frequent errors of grammar and word order which occasionally obscure meaning.
	2	Grammar and word order errors make comprehension difficult. Must often rephrase sentences and/ or restrict

Grammar		him to basic patterns.
	1	Errors in grammar and word order as severe as to make speech virtually unintelligible.
Vocabulary	4	Sometimes uses inappropriate terms and/ or most rephrase ideas because of lexical inadequacies.
	3	Frequently uses the wrong words; conversation somewhat limited because of inadequate vocabulary.
	2	Misuse of words and very limited vocabulary make comprehension quite difficult.
	1	Vocabulary limitations so extreme as to make conversation virtually impossible.
Fluency	4	Speed of speech seems to be slightly affected by language problems.
	3	Speech and fluency rather strongly affected by language problems.
	2	Usually hesitant; often forced into silence language limitations.
	1	Speech is so halting and fragmentary as to make conversation virtually impossible.
Comprehension	4	Understands nearly everything at normal speed, although occasional repetition may be necessary.
	3	Understands most of what is said at slower than normal speed with repetition.
	2	Has great difficulties following what is said. Can comprehend only "social conversation" spoken slowly and with frequent repetitions.
	1	Cannot be said to understand even simple conversational English

3.9 Technique of Data Analysis

The data from test (pre-test and post-test) were recorded based on the students' performance when they are presenting Javanese Folktale. The researcher counted the mean between pre-test and post-test. Then, after getting the score, the researcher compare between pre-test and post-test whether there is pecific improvement of students' speaking skill or not by using formula below:

$$M = \frac{\Sigma x}{N}$$

M   : Mean

Σx   : total of students'score

N   : total of students

The researcher also analyzed the normality of pre-test and post-test by using SPSS 16.0 to check whether the distribution of the score was normal or not. If the distribution score was normal, it can be said that the distribution of the test was valid.

Meanwhile, to interpret the t paired between pre-test and post-test to answer the result of hypothesis, it should be consulted with the critical value of the t-table to check whether the difference is significant or not. In education research, the 5% (0.05) level of significance was used. If the t value was higher than t table, it means that there was a significant difference between two means. On the contrary, if t value was lower than t table, it means that there is no significant difference between two means.