### **CHAPTER III**

## **RESEARCH METHOD**

This chapter discusses the method that is used in conducting this study. The discussion includes the research design, variable of the research, population and sample, instrument, procedure of treatment, data collection, and data analysis and validity, reliability of the instrument.

## A. Research Design

The appropriate design of this research is quantitative research. This type of research study emphasizes on number, measurement, control experiment and attempt to know how well something is done. McMillan stated that in experimental research the investigators have control to over one or more factors in the study.<sup>1</sup> The design is classified as a quasi experimental design because there are two groups that are experimental and control groups which are selected without random assignment.<sup>2</sup> In this study, the two groups are given a pre-test. Then, it will be followed by the treatment which is examined through a post-test.

#### Table 3.1 The Design of This Study

GROUP	PRE-TEST	TREATMENT	POST-TEST
Experimental	Pre-test	Hand Puppet	Post-test
Control	Pre-test	Picture Series	Post-test

<sup>&</sup>lt;sup>1</sup>H. J. McMillan. *Educational Research Fundamental for the consumer.n. p.*(Virginia: Harper Publishers. 1992) 13

<sup>&</sup>lt;sup>2</sup>John W. creswell. *Research Design Qualitative And Quantitative Approach* (California: SAGE Publications. 1994)132

The experimental group will be taught by using Hand Puppet. They are given a topic, and start to speak in each step of this strategy. On the other hand, the control group does some the same like the experimental group activity without using Hand Puppet.

## **B.** Research Variable

Variable as a label or name that represents a concept. In this research, there are three variables; they are independent, dependent variable and moderator variable. The independent variable is the major variable which is elected, manipulated and measured for investigation. In this study, the independent variable is Hand Puppet. Meanwhile, the dependent variable is the variable which is observed and measured to determine the effect of the independent variable. The students' speaking skill which reflected in test score is the dependent variable. The last, imagination is as moderator variable.

## C. Population and Sample

The population of this research is the fifth grade students of MI Hidayatus Shibyan in the academic year of 2021/2022. The fifth grade of MI Hidayatus Shibyan Sumberjo is divided to three classes; they are 5 A, 5 B and 5 C classes. The sample of this research is the fifth grade students at "5 A as the control group and 5 B as the experimental group".

## **D.** Procedure of The Treatment

In conducting the research, the researcher uses some procedure, the first is giving pre-test to experimental and control group. Giving treatment to experimental group and control group. The last is the evaluation by giving posttest to experimental and control group.

The researcher take class 5 A as the control class and 5 B as the experimental class that is given different treatment. Therefore, the researcher will know the result both of them. In this step, the researcher explain, how the procedure of experiment. There are some ways to make this research so easy to catch by the students and make them interested. The procedures of teaching are pre-teaching activity, teaching activity and post-teaching activity.

Control group	Experimental group	
Pre-teaching	Pre-teaching	
• Greeting	Greeting	
• Checking the students'	• Checking the students'	
attendance	attendance	
• The students' answer the	• The students' answer the	
teacher's question	teacher's question	
<u>Main teaching</u>	Main teaching	
• The teacher explains about the	• The teacher explains about	
topic	the topic	
• The teacher give an example by	• The teacher give an example	
using picture series	by using hand puppet	
• Asking the students to tell about	• Asking the students to tell	
the topic based on the picture.	about the topic by performing	
• Asking the students to answer	the hand puppet	
the questions based on the topic	• Asking the students to answer	
Post-teaching	the questions based on the	
• The teacher and the students	topic	
check the students' task	Post-teaching	
• The teacher gives chance to	Concluding the materials and giving	
students to ask dealing with the	positive feedback	
material		

 Table 3.2 The Procedure of Treatment

### **E.** Research Instruments

Instrument is a tool to collect a data. There are two instrument in this research, those are test for testing students' speaking ability and questionnaire for imagination level.

# 1. Speaking Test

An instrument is a device to get data. The instrument used in this study is speaking test, see appendix I. Test is given twice; pre-test and post-test. Each test, the researcher will give 3 - 5 minutes for each students.

Pre-test is given before the students get the treatment. First step in experimental research, the researcher gives pre-test to experimental and control group. Pre-test is used to know the students' skill before treatment. In pre-test, the researcher gives some topics of recount text. The students will choose a lottery than explain the question inside.

Post-test is given in the end of meeting after getting treatments. The last step of experimental research is by giving posttest to experimental and control group. The aims of post-test are to know the progression of students in speaking ability after the treatment and to know the result of the treatment whether the treatment is effective or not. The complete test of pretest and posttest can be seen appendix 1.

# 2. Imagination Questionnaire

According to Sugiyono, Questionnaire is data collection technique that is carried out by giving a set of questions or statements to respondent to answer.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Sugiyono, Metode Penelitian Kuantitatif, Kualitatif dan R & D, (Bandung:Alfabeta, 2011) p. 142

Questionnaire is data collection technique that is efficient if the researcher knows variable that was measured and knew what could be expected from respondent. Questionnaire in this research was developed from the book written by Yoris Sebastian with title Oh My Goodness *Buku Pintar Seorang* Creative Junkies and Memory Skills in Business which was written by Madelyn Burney and Allen. The questionnaire measured the extent of your imagination ability, see appendix II. The questionnaires is formed in English version but the researcher translates the questionnaires in Bahasa. Researcher chooses instrument which dimension of the variable based on discussion about characteristics of visual memorizers and auditory memorizers according to a psychologist F.C. Bartlett. Psychologists agree that most individual are either better at visual or auditory memorization.<sup>4</sup> The questionnaire was 36 items and divided into 2 parts: visual and audio imagination.

The concept of	The indicators		Item
imagination			number
Media to explore and learn the understanding of reality their self		The ability to imagine things in the surrounding environment	1, 5, 6, 8, 10, 11, 13, 14, 16, 17, 19. 2, 3, 4, 7, 9,
	2.	The ability to listen sound in the surrounding environment	$\begin{array}{c} 2, \ 3, \ 1, \ 7, \ 9, \\ 12, \ 15, \ 18, \\ 20 \end{array}$

 Table 3.3 Blueprint of Imagination Questionnaire

All questions in questionnaire discuss about how powerful the power of students' imagination and each question consist of 5 answers that were scored as

<sup>&</sup>lt;sup>4</sup> Madelyn Burley and Allen, Memory Skills in Business, (California: Crisp Publication, Inc, 1988) p.23

follows: Score: Extremely clear: 5, Clear: 4, Fairly clear: 3, Unclear: 2 and Very unclear : 1.

### F. Data Collection

The procedures of data collecting are conducted as follows: the first is the researcher chooses the fifth graders students of MI Hidayatus Shibyan as the population. The second, the researcher takes 5 A as control and 5 B as the experiment's sample. The third is before the researcher starts the treatment, the researcher gives questionnaire for imagination level. The fourth the researcher administers a pretest to assess the students' speaking skill. The fifth, the treatment is carried out by the researcher using hand puppet for the experimental group and picture series for the control group. The sixth is the researcher administers a posttest to assess the students' speaking skill after they have completed the treatment. Finally, the researcher evaluates the results. To obtain the significant data result, an analysis is carried out.

#### G. Data Analysis

1. Data Analysis of Speaking Test

After knowing the result, the researcher concludes whether the method is effective or not for teaching speaking skill. When the researcher gets the result of pre test and post test in experimental group and control group, the researcher takes a record all of students. The recording is when a student comes forward to present the material that has been chosen randomly. The scoring rubric can be seen in appendix III. Meanwhile, the analysis in this research is quantitative. The researcher uses ANCOVA (Analysis of Covariance) to analyze the data, because in experimental designs to control for factors which cannot be randomized but which can be measured on an interval scale. To know the effectiveness of using Hand Puppet in teaching speaking skill to the fifth grade students of MI Hidayatus Shibyan Sumberjo.

2. Data Analysis of Imagination Questionnaire

The questionnaires consist of 20 items. The participants are mostly asked to react on five point with Very clear (*sangat jelas*), Clear (*jelas*), Fairly clear (*cukup jelas*), Unclear (*tidak jelas*), Very unclear (*sangat tidak jelas*). Each item receives a score of 5,4,3,2 and 1.

Scale	Description
70 or More	High Imagination
40 to 69	Average Imagination
39 or less	Low Imagination

**Table 3.4 Rating Scale of Imagination**