

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher presents the research method. It consists of research design, research variable, population and sample, research instrument, treatment procedure , data collection, and data analysis.

3.1 Research Design

The researcher used quantitative research methodology in this research. Quantitative methods require data collection, data analysis, data interpretation, and writing of research findings (Creswell, 2014). Quantitative research is widely used to present a fact or describe statistics, test a theory, show relationships between variables, and some are developing concepts, developing understanding or describing many things, both in the natural and social sciences.

This study was quasi-experimental because the researcher compared the experimental group with a control group that got treatment. The purpose of quasi-experimental research is to obtain information that is an estimate of information that can be obtained from actual experiments with circumstances that do not allow to control or manipulate all relevant variables (Suryabrata, 2013). This study involved two groups, namely the control group and the experimental group.

First, the researcher gave pretest before experimental used is applied in class. Then, the researcher gave treatment and after treatment finished, the researcher gave post test to find out the results. The design of this research can be seen in the table below:

Table 3.1 The Research Design

Group	Pre-test	Treatment	Posttest
Experimental	X1	PS	X2
Control	Y1	RP	Y2

(Sugiyono, 2010)

Note:X₁ : Pre-test experimental groupY₁ : Pre-test control Group

PS: Picture Series

RP: Roleplay

X₂ : Post-test of experimental groupY₂ : Post-test of control group**3.2 Variable**

According to Ary (2002), a variable is an attribute that is regarded as reflecting or expressing some concept or construct. Variable is divided into two, they are independent variable and dependent variable. In this research, the researcher used the dependent variable and independent variable. The Independent variable was teaching techniques in teaching speaking namely picture series for the experimental group and roleplay for the control group, and the dependent variable was students' speaking skill.

3.3 Population and Sample

A population can be interpreted as members who provide information about the class of people, events, or objects that are determined correctly or perfectly. Population is an object that has some qualities and characteristic that is chosen to be cleared and to be concluded by the researcher . The target population

in the present study was the first-grade students of MAN 5 Kediri. The samples of this research were two classes in the school. The researcher did not have authority to take the sample of the subject randomly, so the researcher take the whole class IPS and class IIK as the sample of this study. Those were social class (IPS) consists of 36 students and religion class (IIK) consists 35 students. This sample is classified as an experimental group and a control group. Social class (IPS) is the experimental group, and religion class (IIK) is the control group.

3.4 Research Instrument

The research instrument is a tool used to measure students in the class. It is used to get primary data and supporting data. In addition, there are several research instruments in quantitative research. The type of using research instrument must be adapted to the research problem. In this study, the researcher used test. There were two types of test: pre-test and post test. They was give to get a speaking competency score. After pre-test and post test were done, researcher could receive data.

1. Pre-test

The first instrument to take the data giving the pre-test to the experimental group. This test was given to students who are used to learn the abilities of students before treatment. In this test students are told to choose one of the legends or folklore in the picture series and then told in front of the class using simple past tense. Each student has 5 minutes to get according to their understanding. The topic is about legends or folklore, so students can tell stories

freely and researcher was only pay attention to their speaking skills. The complete pre-test can be seen an appendix 1.

2. Post test

The second instrument is to take the data giving post-test to all groups. Post test was given to find out the development of the conversation to students after giving a treatment and to find out the results of the treatment whether the treatment is effective or not. Post test questions is almost the same as pre-test. The question is students must read the narrative text in the picture series with the topics provided. If students are confused about determining the topic, the researcher gave several different topics to the topics given in the pre-test. The complete pre-test can be seen an appendix 2.

3. Scoring rubric

Scoring rubric is able to help the teacher give speaking evaluations to students. Teacher assessment will be easier and more consistent because of the scoring rubric. There is an example of scoring rubric for speaking test :

Table 3.2 Scoring Rubric for Speaking

RUBRIK ASSESSMENT OF SPEAKING		
ASPECT	SCORE	EXPLANATION
Pronunciation	5	Has little foreign pronunciation.
	4	Clear enough to be understood.
	3	The pronunciation leads to misunderstanding.
	2	Very hard to understand. Must frequently be asked to repeat.
	1	Unclear pronunciation
Grammar	5	Makes only little error on grammar and word order.
	4	Occasionally makes errors and unclear meaning.

	3	Makes frequent errors of grammar and word order.
	2	Grammar and word-order errors make comprehension difficult.
	1	Makes some errors in grammar which leads to unclear meaning.
Vocabulary	5	Use of vocabulary and idioms like native speakers.
	4	Sometimes uses inappropriate terms.
	3	Frequently uses wrong words / Inadequate vocabulary.
	2	Misuse of words and very limited vocabulary.
	1	Vocabulary limitations so extreme and impossible to make conversation.
Fluency	5	No hesitation in speaking like the native speakers.
	4	Speed of speech seems to be slightly affected by language problems.
	3	Speed and Fluency are rather strongly affected by language problems.
	2	Usually hesitant: often forced into silence.
	1	Speech is so halting (stop moving) and impossible to make conversation.
Comprehension	5	Appears to understand everything without difficulty.
	4	Understand nearly everything at normal speed, although occasional repetition may be necessary.
	3	Understanding with slower than normal speed with repetitions.
	2	Has great difficulty following what is said and needs frequent repetitions.
	1	Cannot be said to understand even simple conversational English.

(David, 2004)

Criteria for score:

- 5 = Excellent
- 4 = Very Good
- 3 = Good
- 2 = Average
- 1 = Poor

3.5 Treatment Procedure

This research used quasi-experimental design. The researcher as the teacher applies some treatment procedures to the experimental group and the control group. The experimental group was taught by researcher using the picture series and the control group was taught by researcher using the roleplay technique.

Table 3.3 The treatment Procedure

Experimental Group	Control Group
Opening	Opening
-Greeting -Asking the students' condition -Checking the attendance list -Reviewing the previous material -Explaining today's material	-Greeting -Asking the students' condition -Checking the attendance list -Reviewing the previous material -Explaining today's material
The researcher explained about the definition, the researchers provided narrative text material.	The researcher explained about the definition, the researchers provided narrative text material.
The researcher gave an example of narrative text.	The researcher gave an example of narrative text text.
The researcher asked the students to make some groups consist of 5-6 students,	The researcher asked the students to make some groups consist of 5-6 students,
The researcher gave the procedure of Picture series	The researcher gave the procedure of Roleplay
The researcher gave kind of themes and then the students choose one of the themes.	The researcher gave kind of themes and then the students choose one of the themes.
Students applied picture series according to procedure.	Students applied roleplay according to procedure together in group.
The researcher gave feedback and supports students.	The researcher gave feedback and supports students.
Researcher asked students to conclude current learning	Researchers asked students to concluded current learning
The researcher told the learning plan for the next meeting.	The researcher told the learning plan for the next meeting.
Closing	Closing

The schedule of the activity done in this research can be seen in Table 3.4.

Table 3.4 The schedule of the activity

Activity	Experimental Group	Control Group
Pre-test	January, 14 th , 2020	January, 14 th , 2020
Treatment 1	January, 21 st , 2020	January, 21 st , 2020
Treatment 2	January, 28 th , 2020	January, 28 th , 2020
Treatment 3	February, 4 th , 2020	February, 4 th , 2020
Post-test	February, 11 st , 2020	February, 11 st , 2020

3.6 Data Collection

In conducting this research, the researcher gave pre-test to both experimental group and control group, and then the researcher gave treatment to experimental group by using picture series technique and for control group using discussion technique. The last, the researcher gave post test to both experimental group and control group. In collecting the data, the researcher used oral test performance. The students perform in front of the class to tell story about narrative text. When they perform in front of the class, the researcher was evaluated their performance. The score is considered based on some criteria; those are grammar, vocabulary, fluency, pronunciation and understanding. The result of the evaluation is considered by the average mark from the researcher. It is to know whether picture series technique is effective for first grade students at MAN 5 Kediri.

3.7 Data Analysis

In data analysis, researcher must analyze all data analyzed, illustrate, and analyze data. If the data is normal the ANCOVA is used, if the data is not normal, Mann Whitney U Test is used. The standard distribution of Mann Whitney U is

significant must be lower than significance 0.05 as the standard distribution. If the significant of the data result is lower than significant 0.05 as the standard distribution. It means that H_0 is rejected and H_a is accepted. If the data is not normal the researcher used Mann Whitney U Test. Test is used to analyze the data in this study. The Mann Whitney U Test is a alternative to the parametric test. The analysis of Non parametic Tests is done by using SPSS program. The Mann Whitney U Test is used to test the comparative hypotheses of two independent samples when the data are ordinal. In testing zero hypothesis indicates that there is no real difference between the two data groups and where the data is taken from an unrelated sample, we can do the Mann Whitney U Test (Teguh, 2011).