CHAPTER III

RESEARCH METHOD

This chapter discusses the research design, variable of research, the population and sample, the research instrument, the treatment, the technique of collecting data, and data analysis.

A. Research Design

The experimental research is chosen in this study in order to investigate the effectiveness of using Picture Word Inductive Model strategy in teaching writing skill. An experimental is a study of the effect of the systematic manipulation of one variable(s) on another variable. In manipulation of variable is mentioned the experimental treatment or "independent variable". Whereas, observe and to measure variable is mentioned as "dependent variable" (Ary, Jacobs, & Sorensen, 2010). It means that an effort to control all of variables which are affect the result except the independent variable. Then, while the independent variable has the impact for the dependent variable, it can be said that independent variable "caused" or "probably caused" the dependent variable.

The research design used in this study was quasi-experimental research in the form of pre-test post-test non-equivalent control group design. Quasi-experimental design wass used in this research because of the participants of the research were not randomly assigned. In other word, they were already part of a group. This research was divided into two class, they were experimental and control class. The experimental class applied Picture Word Inductive Model

(PWIM) strategy and the control class used listing strategy. Each class received the same pre-test and post-test.

In this research, the students in the experimental class got the treatment (X) by using Picture Word Inductive Model (PWIM) strategy, whilst the students in the control class got the treatment (O) by using listing strategy. The design was illustrated as follows:

Table 3.1 Experimental Design

Group	Pre-test	Treatment	Post-test
G1	T1	X	T2
G2	T1	O	T2

Note:
G1 = First group (experimental class)
G2 = Second group (control class)
T1 = Pre-test
T2 = Post-test
X = Treatment by using PWIM strategy
O = Treatment by using listing strategy

B. Variables of the Research

Variables of this research were independent and dependent variable. Independents variable were variables selected by the writer to determine their effect or relationship with dependent variable. In other words, independent variables were antecedent to another variable, and dependents variable were the consequence of another variable. In this research, the independent variable was writing strategy and the dependent variable was students' writing skill on recount text.

C. The Population and Sample

a. Population

The population of this study was the tenth grade students of MA Ma'arif Udanawu. There were about 627 students for the tenth-grade that divided into two major (science and social) and fifteen classes. In terms of gender, students in this school were classified into male and female in each class.

b. Sample

The study was conducted at the tenth grade students of MA Ma'arif Udanawu. As the participants, X MIA-1 as the control class and X MIA-2 as the experimental class. The researcher took 34 students in each class. Thus, the total participant of this study was 68 students. All of the students in this research were male, so it could be concluded that they were homogeny. The sampling technique used in this study was non-randomized sampling. The reason why the researcher chose class MIA 1 and MIA 2 on the tenth year students because they were have same ability in writing recount text and also based on recommendation from the English teacher over there. Furthermore, recount text material was taught in the tenth class at second semester.

D. The Research Instrument

The instrument of this study was test in which delivered become pre-test and post-test.

a. Pre-test

Before the treatment, the researcher administered a pre-test to the students to measure the achievement of students' skill in recount text writing. In this test, students were asked to write a recount paragraph about a topic. **(See Appendix 1)**

b. Post-test

After the treatment, the researcher administered a post-test to the students to measure students' growing score. The instrument of this test as like in a pre-test but it was given after the treatment. **(See Appendix 2)**

c. Scoring rubric

In analyzing of scoring the writing test, the researcher used analytic scoring stated by Brown (2004). There were five-aspects or categories that would be a specific purpose in scoring. It was used a scale to reflect the instructional focus.

Table 3.2 Assessment of Recount Writing

Categories	Score	Performance description
Content (30%) Topic, details	5	The topic is complete and clear and the details are relating to the topic
	4	The topic is complete and clear but the details almost relating to the topic
	3	The topic is complete and clear and the details are not relating to the topic
	2	The topic is almost complete and clear and the details are not relating to the topic
	1	The topic is not complete and clear and the details are not relating to the topic
Organization (20%) Orientation, events, re-orientation	5	Orientation is complete, events and re-orientation are arranged with appropriate connection
	4	Orientation is complete but the events and re-orientation are almost arranged with appropriate connection
	3	Orientation is complete, the events and re-orientation are not arranged with appropriate connection
	2	Orientation is almost complete, the events and re-orientation

		are not arranged with appropriate connection
	1	Orientation, events, and re-orientation are not complete and are not arranged with appropriate connection
Vocabulary (20%)	5	Effective choice of words and word form
	4	Few error of words and word form
	3	Half the error and word form
	2	Limited ranged of confusing words and word form
	1	Very poor knowledge of words, word form, and understandable
Syntax/Grammatical (15%) Using past tense, agreement	5	All of grammatical or agreement accuracies
	4	Very few grammatical or agreement inaccuracies
	3	Few grammatical or agreement inaccuracies
	2	Reader difficult to understand what writer is trying to say
	1	Unintelligible sentence structure
Mechanics (15%) Spelling, punctuation, capitalization	5	Spelling, punctuation, and capitalization are correct
	4	Few problem in spelling, punctuation, and capitalization
	3	Errors in spelling, punctuation, and capitalization
	2	Incorrect in spelling, punctuation, and capitalization
	1	Disregard in spelling, punctuation, and capitalization

Formula: $\frac{3C+2O+2V+1,5+1,5M}{50} \times 100$

E. The Treatment Procedure

Treatment was a procedure that applied by the researcher to find out the effectiveness of using the strategy in writing. There were two groups observed, control group and experimental group. The treatment of Picture Word Inductive Model strategy was given to experimental group. Moreover, control group was a class that received listing strategy. For activities\ on the treatment, were given for 3 (three) meetings in each class. The activities given for the treatment to both groups was illustrated in Table 3.3.

Table 3.3 Treatment Procedure

Activity	Experimental	Control
Pre-activity	Opening	Opening
	Check attendance and presentation about the text material	Check attendance and presentation about the text material
Main activity	Teacher explain about recount text	Teacher explain about recount

		text
	Teacher gives a topic and a picture to the students	Teacher give a topic to the students
	Students are asked to write and give label to the picture	Students are asked to produce some list of words based on the topic
	Students write vocabularies or label the picture and draw a line from identified object	Students are asked to generate recount text based on their word list
	Ask students to generate sentence, sentences, and a paragraph	Teacher checks the result
	Students produce a recount text about the picture word chart	
	Teacher checks the result	
Post-activity	Closing	Closing

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

Table 3.4 The Activity Schedule

Activity	Experimental group	Control group
Pre-test	February 1st, 2020	February 3rd, 2020
Treatment 1	February 7th, 2020	February 8th, 2020
Treatment 2	February 8th, 2020	February 9th, 2020
Treatment 3	February 14th, 2020	February 15th, 2020
Post-test	February 22nd, 2020	February 17th, 2020

F. The Technique of Collecting Data

To investigate the effectiveness of Picture Word Inductive Model (PWIM) strategy, the researcher applied two steps of the technique to collect the data. This research used quantitative data that taken from the students' writing score. The data were gotten from test, they were pre-test and post-test.

In this research, pre-test and post-test were given both in control group and experimental group to find out their understanding in learning recount text. Pre-test was given before the treatment to measure students' writing skill. That was a strategy to investigate the first score of writing skill. After pre-test, the researcher gave the treatment in which Picture Word Inductive Model (PWIM) strategy for

experimental group and listing strategy for control group in teaching-learning writing. Finally, post-test was given to each class and asked them to do the test individually. The researcher asked the students to produce recount paragraph based on a topic. The post-test was given after students got the treatment and used as final measurement the treatment. The last, the result of test was analyzed statistically.

G. Data Analysis

Data analysis was a process in analyzing data. It was done after the data obtained from the score of the test. The data were gotten from pre-test and post-test of experimental and control group. The scores of the experimental and the control groups were calculated by using procedure of ANCOVA because the sample of the research was not taken randomly and the instrument used was a test. In this case, Analysis of Covariance (ANCOVA) was done by using SPSS 21 program.

In scoring the writing test, it involved the subjectivity because the kind of test used was writing on recount text by using PWIM strategy and listing strategy. Therefore, inter-rater reliability was used to find out whether a test was reliable or not. Inter-rater reliability occured when two or more scores yield inconsistent scores of the same test, possibly for lack of attention to scoring criteria, inexperience, inattention, or even preconceived biases (Brown, 2004). The researcher chose the English teacher on the tenth grade of MA Ma'arif Udanawu as rater 1 and the researcher as the rater 2. In correlating the score from two raters, the researcher used Pearson Product Moment formula by SPSS 21 program.