

CHAPTER III

RESEARCH METHOD

3.1 Setting of the Research

The researcher took her research at the eighth grade of MTs Al Muttaqin Rengging in the academic year of 2017/2018 which located at Jl. Jepara-Kudus KM 13 Pecangaan, Jepara. The research had been done in five meetings, from 19th April up to 12th May 2018 consisting of giving pre-test, giving materials, and giving post-test in the last meeting.

3.2 Subject of Study

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, 2015:38). Based on the statement, the researcher conclude that population is number people that have characteristic and become subject of research. In conducted sampling, the researcher will use purposive sampling. In purposive sampling, researchers handpick the cases to be included in the sample on the basis of their typicality (Cohen, et.al., 2000:103).

The population of this research was the eighth grade students of MTs Al-Muttaqin Rengging in the academic year of 2017/2018. It consisted of 76 students and divided into two classes of eighth grade, there were 8A and 8B. Class 8A was for experimental group consisting of 39 students and class 8B was for control group consisting of 37 students. The experimental class was taught using comic strip media while the control class was taught using traditional that was a translation technique.

Table 3.1
The Number of population

No	Class	Class	Students
1	Experiment	8A	39
2	Control	8B	37
Total			76

3.3 Research Design

The researcher used quasi-experimental research design. This design had control group but cannot function fully to control external variables that affect the implementation of treatment. The researcher used nonequivalent control group design which was the classes not chosen at random, both were compared, although the group was selected and placed without randomly. Two groups that exist got same pretest, but got different treatment, and the later got the same post-test. Below was the general overview of quasi experimental design.

Table 3.2
Quasi-Experimental Design

Class	Pre test	Variable	Post Test
8A	O ₁	X	O ₂
8B	O ₃	-	O ₄

Where :

8A : The experiment group

8B : The control group

O₁, O₃: The pretest administered before the treatment

X : The independent variable or the treatment (using comic strip)

O2, O4: The post test administered after the treatment

(Mubarok, 2015:102)

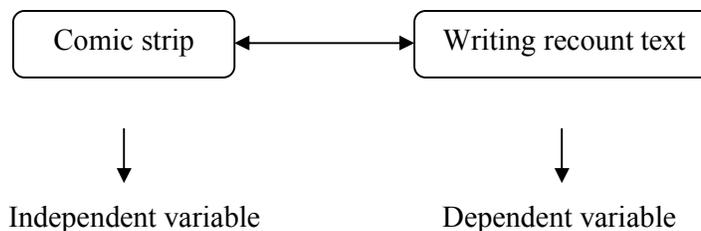
In this research, the students in the experimental class were taught by using comic strip as media and the students in controlled class taught without using comic strip as media but using traditional that was a translation technique. The research was done in five meetings including giving pretest, treatment, and posttest. Pretest was done to collect the data by measuring students' performance before received a treatment. Meanwhile, posttest was done to measure students' performance after received a treatment. This research consisted of five meetings that described as below :

Table 3.3
The Process in Experimental Research

Date	Meeting	Experimental Class	Control Class
19 April 2018	1	Giving the pre-test	Giving the pre-test
28 April 2018	2	Explaining the generic structure or rhetorical features of a recount text and introduce Comic strip	Explaining the generic structure or rhetorical features of a recount text
03 May 2018	3	Asking and guiding to write recount text using comic strip about Fishing	Asking to write recount text according to example in the text book about Fishing
05 May 2018	4	Asking and guiding to write recount text using comic strip about	Asking to write recount text according to example in the text

		Camping	book about Camping
12 May 2018	5	Giving the post test	Giving the post test

There were two variables which involved in this research. They were comic strip as independent variable and writing recount text as dependent variable.



3.4 Research Instrument

The instrument of the research was written test. The test consisted of pretest and posttest in both experiment and control classes. It was used to get information about students' writing improvement. The researcher conducted pre-test and post test to measure the improvement on the students writing skill on recount text by using comic strip. The pretest and posttest were given different topics. The topics of pretest were about "Funny experience, Vacation, and Unforgettable moment" and the topics of posttest were about "Holiday, Bad experience, and Best moment."

The students in the experimental and control class were taught different method. The students in experimental class learned recount text by using Comic Strip. Meanwhile, the students in the controlled class learned recount text using traditional technique that was translation. Nonetheless, they were given the same topic in the pretest and posttest.

Before the test used to students, validity and reliability are required as the measurement of test. According to Gronlund (in Cohen, et.al., 2000:105)

validity should be seen as a matter of degree rather than as an absolute state. To gain the validity of the instrument, the researcher will use internal validity. Internal validity sought to demonstrate that the explanation of a particular event, issue or set of data which a piece of research provides can actually be sustained by the data. To obtain the validity of the test, the researcher used content validity by adjusting the test with core competency and basic competence.

Furthermore, to achieve the content validity of the instrument the researcher asked the English teacher help to check the appropriateness of the instrument whether it is proper to give to the students or not. More importantly, the researcher would be made sure that the instrument is valid by making the relevance of the objective of the test, the instruction of the test, and the indicator with KI-KD (core competence and basic competence) which is based on curriculum 2013.

Based on the questionnaire checklist of instrument test that was given to English teacher, it can be concluded that the instrument test was proper to give to the students and it was relevance with core competence and basic competence in curriculum 2013.

3.5 Technique of Data Collecting

The technique of collecting data in this research used quantitative data. The quantitative data collect from the students' score in pretest and posttest. The pretest and posttest were given to the experimental and controlled class. The procedure used in this experimental is pretest – treatment – posttest as fellow:

1. Pretest

Pretest was done to collect the data by measuring students' performance in writing recount text before received a treatment, so it was held in the first meeting. Both of experimental and controlled classes were asked to write a recount text according to one of the topic given.

2. Treatment

In the treatment, the teacher did teaching learning activity with the students both in experimental class and controlled class about three meetings. In the first meeting of treatment, she explained about the generic structure, rhetorical features of a recount text and introduced Comic strip. Then, in the second and last meeting of treatment, she thought how to write recount text and asked the students to practice to write recount text by using different topic and also different comic strip especially for students in experimental class.

3. Posttest

The last is posttest. Posttest was done to know the progressive between the experimental and controlled class after received a treatment, so it was held in the last meeting. Students in experimental class were asked to write a recount text according to one of the topic given by using comic strip. Meanwhile, students in controlled class were asked to write a recount text according to one of the topic given without using comic strip.

In analyzing and assessing the students' writing ability, the analytic scale is used as described in table 3.4.

Table 3.4**Scale for assessing the students' writing ability**

Aspect	Score	Performance Description
Content - Topic - Details	30-26	The topic is complete and clear The details are relating to the topic
	25-21	The topic is complete and clear The details almost relating to the topic
	20-16	The topic is complete and clear The details are not relating to the topic
	15-11	The topic is not clear The details are not relating to the topic
Organizing - Orientation - Events - Reorientation	20-17	Orientation is complete and events are arranged with proper connective
	16-13	Orientation is almost complete and events are arranged with almost proper connective
	12-9	Orientation is not complete, events are arranged with few misuse proper connective
	8-5	Orientation is not complete, events are arranged with misuse proper connective
Grammar - Use past tense	20-17	Very few grammatical inaccuracies
	16-13	Few grammatical inaccuracies but not effect on meaning
	12-9	Numerous grammatical inaccuracies
	8-5	Frequent grammatical inaccuracies
Vocabulary	15-12	Effective choice of words and word forms
	11-9	Few misuse of vocabularies. Word forms. But not change the meaning
	8-6	Limited range confusing words and word form
	5-2	Very poor knowledge of words, word forms, and not understandable
Mechanics - Capitalization - Punctuation	15-12	It uses correct capitalization and punctuation
	11-9	It has occasional errors of capitalization and punctuation
	8-6	It has frequent errors of capitalization and punctuation
	5-3	It is dominated by errors of capitalization and punctuation

Adopted from Brown (2004:244)

3.6 Technique of Data Analysis

The data gained would be in the form of quantitative data. Data analysis is the process of arranging data sequence, organize into a system, category and set of the breakdown of base. In analyzing the data, t-test used to find out the effectiveness of comic strip in teaching writing of recount text. There were several steps to prove the hypothesis, as the following formula:

$$t_0 = \frac{M_x - M_y}{SE_{M_x - M_y}}$$

M_x : Mean of the score of experimental class

M_y : Mean of the score of controlled class

SE_{M_x} : Standard error of experimental class ‘

SE_{M_y} : Standard error of controlled class

(Sodijono, 2011:314)

The steps that must be done in calculating were:

1. Determining mean variable X, with formula as follows:

$$M_x = \frac{\sum X}{N_1}$$

M_x : Mean of the score of experimental class

$\sum X$: Sum of the students' gained score of experimental class

N_1 : Number of students in experimental class

2. Determining mean variable Y, with formula as follows:

$$M_y = \frac{\sum Y}{N_2}$$

M_y : Mean of the score of controlled class

$\sum Y$: Sum of the students' gained score of controlled class

N_2 : Number of students in controlled class

3. Determining standard deviation score of variable X, with formula as follows:

$$SD_x = \sqrt{\frac{\sum x^2}{N_1}}$$

SD_x : Standard deviation score of experimental class

4. Determining standard deviation score of variable Y, with formula as follows:

$$SD_y = \sqrt{\frac{\sum y^2}{N_2}}$$

SD_y : Standard deviation score of controlled class

5. Determining standard error mean of variable X, with formula as follows:

$$SE_{Mx} = \frac{SD_x}{\sqrt{N_1 - 1}}$$

SE_{Mx} : Standard error of experimental class

6. Determining standard error mean of variable Y, with formula as follows:

$$SE_{My} = \frac{SD_y}{\sqrt{N_2 - 1}}$$

SE_{My} : Standard error of controlled class

7. Determining standard error of different mean between variable X and variable Y, with formula as follows:

$$SE_{Mx-My} = \sqrt{SE_{Mx}^2 + SE_{My}^2}$$

8. Determining t_o , with formula as follows:

$$t_o = \frac{M_x - M_y}{SE_{M_x - M_y}}$$

9. Determining t_{table} with degree of freedom (df) in significance level of 5% and 1%, with formula as follows:

$$Df = (N_1 + N_2) - 2$$

Df : Degree of freedom

N1 : Number of students in experimental class

N2 : Number of students in controlled class

3.7 Hypothesis of Statistic

The hypothesis of statistic that used in this research was:

$$H_o : \mu_1 = \mu_2$$

$$H_a : \mu_1 \neq \mu_2$$

H_o : Null hypothesis

H_a : Alternative hypothesis

μ_1 : Students' writing recount achievement, who are taught by using comic strip

μ_2 : Students' writing recount achievement, who are taught without using comic strip

The assumption of the hypothesis as follows:

1. If $t_o > t_{table}$ the null hypothesis (H_o) is rejected and the alternative hypothesis (H_a) is accepted. It means that there was significant difference between the students' score in learning recount text by using comic strip and the students' score in learning recount text without using comic strip at the eighth grade of MTs Al Muttaqin ($\mu_1 \neq \mu_2$)

2. If $t_o < t_{table}$ the null hypothesis (H_o) is accepted and the alternative hypothesis (H_a) is rejected. It means that there was no significant difference between the students' score in learning recount text by using comic strip and the students' score in learning recount text without using comic strip at the eighth grade of MTs Al Muttaqin ($\mu_1 = \mu_2$)