CHAPTER III

METHOD OF RESEARCH

A. Research Design

This research is a quantitative research. Researcher used a form of pre-experimental research. Frankle (2009, p. 7) mentioned experimental research is the method conclusive of scientific method. Because the researcher actually establishes different treatment and then studies their effect, results from this type of research are likely to lead to the most clear-cut interpretation.

The research design is pre- experimental research. It is a one group of pre-test and post-test design. According to Sugiyono (2012, p. 110), one group of pre-test and post-test design is a technique to know the effect before and after being exposed to treatment of some sort. The subject of the research was one class of the eighth grade in MTsN 3 Mahligai Banjarmasin in the academic year 2017/2018. One class as the experimental group is class VIII-H.

The pattern of one group pre-test and post-test I s shown in the table

below:

 Note:

 O_1 : Pre-test

X : Treatment by *instagram*

O₂ : Post-test

There are several things that the researcher should do in this research:

First, the researcher will meet the headmaster of MTsN 3 Banjarmasin to
ask permission for doing research. She gave a proposal and the letter of
Culture and Education Department as the condition to do this research.

- 2. Second, meet in the English teacher for discussing the research and arranging some lessons plan. The researcher and the teacher select the material, prepare media of teaching, and provide test. There eleven meetings for treatment including pre-test and post-test. The students of VIII H were the experimental class and taught descriptive and recount text by Instagram post as treatment to increase students' writing skill.
- 3. Then, giving the students pre-test since the purpose of pre-test is to find out the students' prior knowledge about writing skill of them. There are about recount text and descriptive text by several topics in the pre-test, they are: Go to Beach, Shopping in Duta mall and Experience in Scout for recount text. Meanwhile topic for descriptive text are; Justin Bieber, Cat and Garden. The students were asked to choose one of those topics, and then write the recount text or descriptive text based on the topic they have chosen.

- 4. Next, doing the research by gave the treatment for students. The researcher gives the treatment to teach how to make descriptive and recount text and then post by Instagram.
- 5. After that, giving the students post-test. The purpose of post-test was to find out the students' increasing understanding of the material given. As pre-test, the post-test also had several topics about recount and descriptive text.
- 6. Then, calculating the students' score. The researcher used the scoring rubric from Saputri (2014) Adapted from: Jacobs, 1981 which consists of five aspects. They are content, mechanics, vocabulary, organization, and grammar.
- 7. Next, analyzing the data. In this part, the researcher analyzed the data by using paired sample t-test. Since the purpose is to prove the hypotheses whether Ha is accepted or Ho is accepted, then the hypothesis testing is done.
- 8. Finally, drawing conclusion based on the finding research. After analyzing the data, the researcher found the result and made conclusion based on the result. The results were described by words and table.

B. Research Setting

The research was conducted at the eighth grade students of MTsN 3 Mahligai Banjarmasin academic year 2017/2018. This school is located at at Jalan Mahligai, Pemurus Luar, East Banjarmasin Distric, Banjarmasin City. South kalimantan. Post Code 70654. Time of this research is from 16thJuly 2018 until 16th September 2018. The specific for research is class VIII H. This

research setting is place when researcher Teaching Practice II and based on observation the students at MTsN 3 Banjarmasin.

C. Research Variable

This research has two variables, they are:

1. Independent Variable (x): Instagram

2. Dependent Variabele (y): Writing Skill

D. Subject and Object

The Subject and Object of this research are explained in separate points as follow:

1. Subject of the Research

The subject in this research is eighth graders of H in MTsN 3 Banjarmasin. There are consisting of 35 students. At the time of pre-test and post-test, complete student data only amounted to 30 students.

2. Object of the Research

The object in this research is Instagram as learning tool to increase students writing skill at MTsN 3 Banjarmasin.

E. Research Instrument

The whole process of preparing to collect the data is called instrument. (Fraenkel and Wallen, 2009:113) The instrumentation in this research are:

Documentation of the quantitative data was gained through tests. It was used to evaluate the action and improvement from the students in writing class. The data were gained in the form of pre-test and post-test. The test is in the form of writing test by instagram posting. The kinds of test that researcher

choose is making paragraph. The assessments of this writing include 5 aspects: Content, Organization, Vocabulary, Language use (syntax), and Mechanics. The test is conducted before the treatment as a pre-test and after the treatment as a post-test. In pre-test, all of students of experiment class will make paragraph in their instagram about narrative text or recount text, it means the writer wants to know the student's writing skill before the teacher teachi about narrative text and recount text.

In post-test, all of students of experiment class will make paragraph in their instagram after they learn about writing narrative text or recount text. It means the writer wants to know the student's writing skill after the teacher teaching about narrative text and recount text.

In order to make organizing and analyzing of the data processing easier, the writer organized the measurement design of the students' writing of narrative text and recount text. In classifying the score, the writer used the measurement of students' appropriate writing.

F. Trustworthiness of Data

It is important for the researcher to use valid instruments, for the conclusions researcher draws base on the information should have a validity and reliability.

1. Validity

Validity is the important idea to consider when preparing or selecting an instrument for use. Validity refers to the appropriateness,

meaningfulness, correctness, and usefulness of the inferences a researcher makes (Fraenkel and Wallen, 2009, p. 150).

Content validity is used in this research. Content validation is partly a matter of determining if the content it is supposed to represent (Fraenkel and Wallen, 2009, p. 153). It shows that the content is appropriate or not and also measure the students' achievement in English. Additionally, the validity of the instruments will be consulted with lecturer and English teacher to know whether the instruments are valid or not.

According to Fraenkel and Wallen (2009, p. 154), reliability refers to his consistency of the scores obtained-how consistent they are for each individual from one administration of an instrument to another and from one set of items to another. The researcher used Alpha formula with SPSS 22 program to explain the reliability of the test, with category based on Hilton and Brownlow (2004, p. 364):

If $\alpha = >0.90$ the reliability is perfect

= 0.70-0.90 the reliability is high

= 0.5-0.70 the reliability is moderate

= <0.50 the reliability is low

Validity is a measure that shows the levels validity or the validity of an instrument. A test is said to be valid when able to measure what is about to be measured Product Moment = 5 %. The writer corrects all of

the items to know whether each of them valid or not. It is counted using product moment formula:

$$r_{xy} = \frac{N \sum XY - (\sum X) (\sum Y)}{\sqrt{\{N \sum X^2 - (\sum X)^2\} \{N \sum Y^2 - (\sum Y)^2\}}}$$

Explanations:

 r_{xy} : Correlation coefficient between X and Y variable

N : Total of test participant

X : Score for each item

Y : Total score

(Arikunto: 2010, p. 168).

Table 3.1 The Criteria of Items validity

R	Interpretation
$0.80 < r \le 1.00$	Very High
$0.60 < r \le 0.79$	High
$0.40 < r \le 0.59$	Average
$0.20 < r \le 0.39$	Low
0.00 < r < 0.19	Very Low

2. Reliability Test

To test the extent to which measuring instruments can be trusted or reliable, in this study used the alpha formula because the measured

data in the form of data with Likert scale. The questionnaire answer on Likert scale has gradation from very positive to very negative.

$$r_{11} = \left(\frac{n}{(n-1)}\right) \left(1 - \frac{\sum \sigma_b^2}{\sigma_t^2}\right)$$

 $r_{11} = 1$ Instrument of reliability

 $\sum \sigma_{\scriptscriptstyle D}^2$ = The number of variance items

 σ_r^2 = Total of variance

Number of questions

(Arikunto: 2010, p. 109)

Table 3.2 Interpretation of Reliability

Points	Interpretation
$\alpha \geq 0.9$	Excellent
$0.7 \le \alpha < 0.9$	Good
$0.6 \le \alpha < 0.7$	Acceptable
$0.5 \le \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

G. Data Collecting Procedure

Method of data collection is the way that is used to collect the data.

There are some data that need to fulfill in this research. The technique of data collecting that the researcher uses are:

1. Observation

Observation is the activity of researcher that looking at what people actually does (Robert, 2007, p. 11). This technique used to observe the eighth grade students of MTsN 3 Banjarmasin and also used to collect other related data such as the class environment and activities in the classroom by instagram. In this study the researcher does observation began at 16thJuly 2018 until 16th September 2018.

2. Test

In getting the data, researcher uses test as a method. According to Brown (2001, p. 384), "Test is a method of measuring a personal ability or knowledge in a given domain". In other words, test is used when we want to measure subject's writing skill in a certain area of a study. In this research, the objective test is used to measure students' writing skill especially descriptive text and recount text at the eighth grade by using instagram.

Table 3.3 Categories for Evaluating Writing Saputri (2014) Adapted from: Jacobs, 1981

Aspect	Level	Score	Criteria
Content	Excellent – Very good	30-27	Relevant to the topic, give the detail information, and match the purpose of recount text
Content	Good - Average	26-22	Mostly relevant to the topic, lacks of detail
	Fair - Poor	21-17	Inadequate development of the

			topic, almost match to the purpose
			of recount text
	Very poor	16-13	Does not relate to the topic, does
	Very poor		not match the purpose
	Excellent – Very good	20-18	Fluent expression, ideas clearly
			stated, well organized, logical
			sequencing, cohesive.
	Good - Average	17-14	Loosely organized, limited
			support, logical but incomplete
Organization	Hverage		sequencing.
Organization			Non-fluent, ideas confused or
	Fair - Poor	13-10	unconnected, lacks logical
			development and sequencing.
	Very poor		Does not communicate, no
		9-7	organization, not enough to
			evaluate.
	Excellent – Very good		Use effective word/ word
		20-18	choice/word usage, word form
			mastery.
	Good -		Occasional errors of word form,
	Average	17-14	choice, usage but meaning not
Vocabulary			obscured
	Fair - Poor	13-10	Frequent errors of word form,
			choice, usage and meaning
			obscured/ confused
			Essentially translation, little
	Very poor	9-7	knowledge of English, not enough
			to evaluate.
Language	Excellent –	25-22	Few errors of agreement, tense,
Use	Very good		and word order

	Good -	21.10	Several errors of agreement,
Average	21-18	tense, and word order	
	Fair - Poor	17-11	Frequent errors and meaning
			obscured.
			Dominated by error, does not
	Very poor	10-5	communicate, not enough to
			evaluate
			Exemplary mechanism, may have
	Excellent –	5	minor errors in punctuation,
	Very good	3	capitalization, and spelling, need
			little or no editing.
	Good - Average	4	Adequate mechanism, have some
			errors in punctuation,
			capitalization, and spelling, need
			editing but does not impede
Mechanics			readability
Wiechames		3	Limited mechanism, consistent
	Fair - Poor		errors of punctuation,
			capitalization, and spelling,
			impedes readability.
	Very poor	2	Inadequate mechanism, serious
			and consistent errors in
			punctuation, capitalization, and
			spelling, impedes
			understanding/communication.

3. Documentary

According to Sugiyono (2011), documentary is source of data that used to complementary of research such as written source, pictures, and creations that all of them can give information to research process.

- a. Written source such as diary, life histories, adjustment, policy, etc.
- b. Pictures such as pictures of something that life, sketch, etc.
- c. Creation such as creation of plastics art, film, statue, etc.

H. Technique of Data Analysis

This research used quantitative approaches in analyzing the data. According to Fraenkel and Wallen (2006, p. 15) quantitative data deal primarily with numbers. Therefore quantitative approach was used to describe the improvement of the students' Writing skill whose are taught by instagram.

Experimental research is the most productive researcher method, because if the research is done well can answer the main hypothesis related to causality (Sukardi, 2014).

The technique for data analysis which is used *SPSS program*: The t-test assesses whether the mean scores from two experimental conditions are statistically different from one another. A *repeated-measures* t-test (also known by other names such as the 'paired samples' or 'related' t-test) is what you should use in situations when your design is within participants. In a within participants design, participants contribute data for the dependent variable in all of the experimental conditions.

Paired sample T test is used to compare if there are differences or similarities between two groups of data samples that are related / paired. (Yamin & Kurniawan.2009, p. 56).

One sample T-test is statistical procedure used to determine whether a sample of observation could have been generated by a process with a specific mean.

This test used SPSS 22 program. Shapiro-Wilk because there are 35 students

on this study, to compute the one-sample t test, use the following commands:

- a. Analyze => Compare Means => One-Sample T test
- b. Move scholastic aptitude test-math to the Test Variables box.
- c. Type 500 in the Test Value box (the test value is the hypothesized population mean).
- d. Click OK.

If the value of probability $> 0.05H_0$ (Null Hypothesis) is accepted. And If the value of probability $< 0.05H_0$ (Null Hypothesis) is rejected.