

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

In this study, the writer used a quantitative research. According to Cohen (1980), quantitative research is defined as social research that employs empirical methods and empirical statements. Moreover, Creswell (1994) has given a very concise definition of quantitative research as a type of research that is `explaining phenomena by collecting numerical data that are analyzed using mathematically based methods in particular statistics. In addition, quantitative research is methods that are focused on derivation of conclusion from existing data using proven statistical or general quantitative methods (Matotek, 2012: 78).

This study conducted by using quantitatively through true experimental research with pretest posttest control group design. According to Mubarak (2015), experimental research was a research method used to find a specific treatment effect against the other in uncontrolled conditions. (Mubarak, 2015: 88). This study aimed to find out whether there was a difference between writing skill of students taught with NTP and students taught conventionally. Pretest given to experimental group and control group. This study performed the treatment only in the experimental group. In this study, there were two variables. They were independent variable and dependent variable. Note-Taking Pairs (NTP) as the independent variable and writing skill as the dependent variable. This study focused on giving treatment to the experimental group by using Note-Taking Pairs

(NTP) in teaching students' writing skill, and then in this study observed and analyzed the result through the test. Before started the treatment, the writer was given the pre-test to know the students' competence of their writing skill. After the writer given the pre-test, in the first meeting the writer taught writing by using Note-Taking Pairs (NTP) in experimental class and without using Note-Taking Pairs (NTP) in controlled class. In the last meeting, the writer given the post-test to find out whether there was a difference between writing skill of students taught with NTP and those who were not. It could be formulated as follows:

Table 3.1 Design of true experimental research

R	O₁	X	O₂
R	O₃		O₄

R = Class

O₁ = pre-test of experimental class

O₂ = post-test of experimental class

O₃ = pre-test of control class

O₄ = post-test of control class

X = treatment

(Sugiyono, 2016: 112)

3.2 Population and Sample of The Study

A population is all the individuals or units of interest; typically, there is not available data for almost all individuals in samples (Hanlon & Larget, 2011: 7). According to Mubarok (2015) population is a unit of object or subject that had certain qualities and characteristics which were studied by the researcher then be deduced (Mubarok, 2015: 31). Population here means the person or object that occurs in this world. In this study, the population are students of the eighth grade students of MTs. Negeri 1 Jepara in academic year 2018/2019.

Furthermore, Mubarok (2015) states, sample is part of the quality and characteristics of the population. Samples taken must be truly representative because the conclusion drawn from these samples will be generalized to the population (Mubarok, 2015: 39). The population of this study was the eighth grade students of MTs. Negeri 1 Jepara in the academic year of 2018/2019. Total populations were 377 students. The technique of sampling used by the writer was simple random sampling. Simple random sampling was used because it was impossible to changed the classroom setting of the school. In this study 72 students in two classes became the sample of the study. The writer take VIII E as the experimental class that had 36 students and VIII F as the controlled class that had 36 students. The experimental class was taught writing through Note-Taking Pairs technique as collaborative technique, while the controlled class was taught writing not through Note-Taking Pairs but used conventional technique.

3.3 Instrument of Study

Sugiyono states that instrument is a media used to collect the data (Sugiyono, 2016: 133). In this study, the writer will use written test to collect the data. The writer use test to find out the significant difference between writing skill of students taught with NTP and who are not. A test is a method to measuring a person's ability knowledge, or performance in a given domain. Test in language education can be divided into two broad categories, namely written test and spoken test (Mubarok, 2015: 68). This study used test as an instrument. In addition, instrument is a tool that will be used by the writer easier to collect the data.

The instrument of test was essay. In this study the test is asking the students to make a written recount text based on own experience as instrument of the test. In evaluating the students' writing skill in recount, the writer used in scoring of composition profile proposed by Heaton (1975). The criteria of scoring of composition are described as the following table:

Table 3.2 Scoring Rubric

No	Items evaluated	Score	Criteria
1.	Content	30-27 (excellent)	Knowledge, substantive, etc.
		26-22 (good)	Some knowledge of subject adequate range, etc
		21-17	Limited knowledge of subject,

		(poor)	little substantive
		16-13 (very poor)	Does not show knowledge of subject, non substantive, etc.
2.	Organization	20-18 (excellent)	Fluent expression, ideas clearly stated, etc
		17-14 (good)	Somewhat choopy, loosely organized
		13-10 (poor)	Non fluent, ideas confused of disconnected
		9-7 (very poor)	Does not communicative no organization
3.	Vocabulary	20-18 (excellent)	Effective word
		17-14 (good)	Occasional error of word
		13-10 (poor)	Error of word
		9-7 (very poor)	Little knowledge of English vocabulary
4.	Language focus	25-22 (excellent)	Effective complex construction
		21-19	Effective but simple

		(good)	construction
		17-11 (poor)	Major problem in simple construction
		10-5 (very poor)	Virtually no mastery of sentences construction roles
5.	Mechanics	5 (excellent)	Demonstrates mastery of sentences construction
		4 (good)	Occasional error of spelling, punctuation, and capitalization
		3 (poor)	Frequents error spelling, punctuation and capitalization
		2 (very poor)	No mastery of conversations, dominated by error of spelling, punctuation, capitalization, paragraphing
	Total	100	

Score:

Content: __+ Organization: __+ Vocabulary: __+ Language focus: __+

Mechanics: __+ = (TOTAL SCORE)

(Heaton, 1975: 109).

3.4 Trying Out of Instrument

The instrumen used in this study was a test. Before a test given to the students, tryout test was applied to know whether the test was good instrument. The result of the test was to find out the validity. According to Arikunto validity is a measure that showed the level of validity or rightness of an instrument (Arikunto, 2013: 211). There are three types of validity, namely content validity, criterion validity, and construct validity.

Hendriyadi (2017) states that evidence of validity related to content is defined as evidence that shows the extent to which the test content is intended for its intended purpose. The evidence is used to establish that the test includes representative or critical examples of the relevant content domain and its contents do not include content outside the domain.

According to Sekaran (2006) Content validity is an estimated validity through testing the feasibility or relevance of the contents of a test through rational analysis by a competent panel or through expert judgment. Content validity ensures that measurements include a set of items that are adequate and represent those that reveal the concept. The more scale items reflect the area or throughout the concept being measured, the greater the content validity. In other words, content validity is a function of how well the dimensions and elements of a concept have been described.

Based on the description above, the writer used content validity. This validity was estimated by testing the feasibility or relevance of the contents of the test through rational analysis by a competent panel or through expert judgment.

3.5 Technique of Data Collection

a. Administering Pre-Test

This test aimed to obtain the data of the students' basic writing skill and to ascertain that the students from the group that had similar capability and the same English proficiency before they received the treatment. In the pre-test the writer used homogeneity test and t-test.

1. Homogeneity test

Homogeneity test is used to determine whether the variant of occurrence is the same or not. The criterion of homogeneity testing is if the significance value is greater than 0.05 then it can be said of two or more groups of data is homogeneous (Gendro, 2015: 150).

2. T-test

T-test was used in the study with the design of one factor of two samples. What is meant by one factor is that there is only one factor found in the research subject (as an object) by the researcher, and two weighted samples there are two groups compared (Sa'idah, 2017: 171).

b. Conducting Treatment

This study conducted to see the used the NTP technique to developed students' writing recount text. The treatment designed for two meetings to the experimental group. Time allocation for each meeting consist of eighty minutes.

Table 3.3 The activity of the treatment

Group	Meeting	Treatment
Experimental	Meeting 1	<ul style="list-style-type: none"> - The writer engages students related to the material of recount text. - The writer asks the students to read some text. - The writer asks the students to take a notes individually. - The writer asks the students to in pairs. - The writer asks the student A begins telling the main points of summarizing from the content of the text to student B who offers correction and additional information.
	Meeting 2	<ul style="list-style-type: none"> - The writer reviews

		<p>the material.</p> <ul style="list-style-type: none"> - The writer asks the students to gather with their partner before. - The writer asked the student B begins telling the main points of summarizing from the content of the text to student A, and student A offers correction and additional information.
Control	Meeting 1	<ul style="list-style-type: none"> - The writer gave explanation about the material. - The writer asks the students to read the text and identify the social function, generic structure, and language features individually. - The writer gave a task

		and ask the students to do the task in class.
	Meeting 2	<ul style="list-style-type: none"> - The writer reviews the material. - The writer asks the students to collect their task. - The writer asks the students to translate a text in Bahasa. - The writer asks one of the students to come forward in front of class to read the text in English and Bahasa. - The writer asks the other student to correct it. - The writer does correction together with the students.

Table 3.4

The Schedule of Implementing the Research

No.	Date	Time	Activity
1.	January 31 th , 2019	07.00 – 08.30 A.M	First meeting in Control Group
2.	February 1 th , 2019	07.00 – 08.30 A.M	First meeting in Experimental Group
3.	February 2 nd , 2019	07.00 – 08.30 A.M	Second meeting in Experimental Group
4.	February 4 th , 2019	12.30 – 14.00 P.M	Second meeting in Control Group

c. Administering Post-Test

The study employed the post test at the end of the study. It used to measured the students' writing skill after the treatments. The post-test had the same procedures as the pre-test.

3.6 Technique of Data Analysis

Data analysis is a process to inspect, clean, transform and model to retrieve important information, to support in decision making and to suggest conclusions (Anupama, 2017: 4853). According to Sugiyono (2016) in quantitative research, data analysis is an activity after data from all respondents or other data sources are collected (Sugiyono, 2016: 207).

The important data collected through administering pre-test and post-test. After getting the data, the writer was processed statistically and analyzed them. The analyzing the data, the writer used statistic technique using SPSS statistical application. The technique used to significant difference between two variables which were tested. The writer used homogeneity and t-test. T-test is used to find whether there was significant difference between the score of students' writing skill by using Note-Taking Pairs technique as experimental group and conventional teaching technique as control group. There were the formula of homogeneity and t-test:

The formula of homogeneity as follow:

$$F = \frac{\text{The biggest variant}}{\text{The smallest variant}}$$

(Sugiyono, 2013: 87).

The formula of t-test as follow:

$$t_0 = \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

(Sa'idah, 2017: 172).

Where:

\bar{x}_1 = mean of variable X (Experimental Class)

\bar{x}_2 = mean of variable Y (Control Class)

s = Standard Deviation

n1 = total of variable X (Experimental Class)

n2 = total of variable Y (Control Class)