CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The design of this research is quasi experimental which used nonequivalent control group design. This design has a control group, but it cannot function fully to control external variables that affect the conduct of experiments (Sugiyono, 2015).

This researcher used nonequivalent control group design. This design is almost the same as the pretest-posttest control group design in true experimental design. Only in this design the experimental group and the control group were not randomly selected (Sugiyono, 2015). The researcher used this design because the sample has been determined and not taken randomly. So, the researcher used this design. It can be described in the following formula:

Figure 2: Research Design

O_1	X	O_2
O_3		O_4

In this design, O_1 and O_2 is the experiment group which is given a treatment. O_3 and O_4 is the control group which not given a treatment. X is a treatment or the implementation of Round Table Technique. O_1 and O_3 is a pre-test group before given a treatment and then O_2 is a post-test group after

given a treatment. Meanwhile, O_4 is a post-test group that not given a treatment.

3.2 Research Variable

The research variable is an attribute or the characteristic or value of people, objects or activities that have certain variations determined by the researcher to be studied and then drawn the conclusion (Sugiyono 2015). The two kinds of variable are independent variable and dependent variable. The independent variable is a variable that affects the dependent variable. Meanwhile, the dependent variable itself is a variable that is influenced by the independent variable. In this research, the independent variable was round table technique and the dependent variable was students' writing skill on narrative text.

3.3 Setting of the Research

This research was held in MA Walisongo Pecangaan Jepara which was located on Kauman Street no.1 Pencangaan Kulon, Pecangaan Jepara. It was done on even semester in the academic year of 2018/2019. The detail of the schedule for conducting the research is in the following table.

Table 3.1 The Schedule of the Research

No	Activities	Date of March								Place
		1th	2th	4th	5th	9th	11th	12th	15th	
1	Sending latter for school									MA Walisongo
2	Pre test									XI MIA 1

										and XI MIA 2
3	Treatment 1 Experimental Group									XI MIA 1
4	Treatment 1 Control Group									XI MIA 2
5	Treatment 2									XI MIA 1 and XI MIA 2
6	Treatment 3 Experimental Group									XI MIA 1
7	Treatment 3 Control Group									XI MIA 2
8	Post test									XI MIA 1 and XI MIA 2

3.4 Subject of the Research

3.4.1 Population

Population is the whole object under study, both in the form of people, object, event, values and all of thing that happen. While, the sample is a portion of the population that will be investigated or it can also be said that the sample is a population in the form of a mini (Arifin, 2014). In this research the population was the entire eleventh grade students in MA Walisongo Pecangaan in the academic year of 2019/2020. The total of the students are 58 which are divided to 17 males and 41 females.

Table 3.2 Total of Population

Class	Number of Students
XI MIA 1	15
XI MIA 2	22
XI IS 1	21
Total	**58**

3.4.1 Sample

Sugiyono (2015) states that sample is part of a number and characteristic possessed by the population. In this research the researcher used non probability sampling that is the sampling purposive technique. The sample of this research was 2 classes out

of 3 which are XI MIA1 and XI MIA2 with total of students is 37, and it is divided into 8 males and 29 females.

The researcher used purposive sampling to choosing the sample of this research. This technique is very suitable to be used in this study because the population is only 3 classes, namely 2 MIA and 1 IIS. So, the researcher used MIA1 class became experimental group, and MIA2 became control group.

3.5 Instrument of Data Collection

In this research the researcher used, test as the instrument for collecting data. The test is one of method for measurement to collect the characteristics' information about an object (Widoyoko P, 2016). In this research the researcher used a pre-test, treatment, and post-test. In pre-test the researcher given test to students to measure the students' pre-ability, and then given them the treatment. After that the researcher given students the test again, this test is post-test. Post-test is the test given to the students to measure the student's ability after getting the treatment.

The type of test is subjective test, according to (Widoyoko P, 2016) subjective test is kind of test where in counting the score is influenced either by response or cross-examiner. The test was in the form of written test, it means the researcher given the topic and ask students to write narrative text. The test given in pre-test and post-test. To collect data, researcher also use a rubric, namely the analitycal rubric. Analytical rubric is a rubric where the components or aspects of the assessment or performance indicators and the

achievement of indicators for each aspect are made more detailedindicators as well as the achievement of indicators for each aspect of the assessment are detailed (Widoyoko P, 2016).

3.6 Try Out of the Instrument

3.6.1 Content Validity

Validity is a degree of instrument accuracy, where the instrument used is absolutely right to measure what will be measured (Arifin, 2014). In the other words validity is considered a measuring tool to show the extent to which the gauge measures something that must be measured. According to (Bambang, 2006). There are five types of validity, namely face validity, predictive validity, construct validity, concurrent validity, and the last is content validity.

In this research the researcher used content validity. Content validity is usually measured for test used to measure the cognitive, such as grammar, vocabulary, and for the other linguistic. The researcher used Lawshe's (1975) to measure the instruments. In Lawshe's (1975) method It involves a panel of subject matter "experts" rating items into one of three categories: "essential," "useful, but not essential," or "not necessary." Items deemed "essential" by a critical number of panel members are then included within the final instrument, with items failing to achieve this

critical level discarded (Scally, 2013). The content validity will be analyzed by using Lawshe's CVR. The equation is below:

$$CVR = \left(n_e - \frac{N}{2}\right) : \left(\frac{N}{2}\right)$$

Note:

CVR = content validity ratio

n_e = number of panel member indicating essential

N = total number of panel members

3.6.2 Construct Validity

Construct validity refers to the extent to which an instrument measures the concept of a theory, which is the basis for the preparation of the instrument (Widoyoko, 2016). In this research used expert judgment to measure the instruments. After the instrument has been constructed about the aspects that will be measured against the theory, then the instrument is then consulted with the experts.

3.7 Method of Data Collection

In this research used, test as a method of collecting data. The test that used is pre-test, treatment, and post-test.

3.7.1 Pre-test

Pre-test is a test that given by teacher before starts the lesson. Pre-test given by researcher to students before give the treatment to measure students' writing to get the score as the first data. The purpose of pre-test is to measure students' ability before given the treatment. It was in the form of oral test. In pre-test students were asked to make simple narrative text. The result of this test will be analyzed by the rubric.

3.7.2 Treatment

Sepianita (2010) states that treatment is as independent variable which tried at group of experiment firstly which has given by pre-test and group of experiment both which have been given by pre-test. In the stage treatment the researcher implemented Round Table technique to the experimental group, and implemented the conventional teaching technique to the control group. The details can be seen below:

Table 3.3 The Activities of Treatment

Experimental group	**Meeting 1** • The students were asked to read example of narrative text • The students were explained about narrative text • The students were asked to make simple narrative text
	Meeting 2 • The students were divided into

	some group • The students were given a topic about narrative text by the teacher in each group • The students were explained about round table rule by the teacher • The students were explained again about the narrative text material. • The students were asked to make narrative text with their group
	Meeting 3 • The students presented their story with their group in front of class
Control Group	**Meeting 1** • The students were asked to read example of narrative text • The students were explained about narrative text • The students were asked to make simple narrative text
	Meeting 2 • The students were explained about narrative text by the teacher • The students were divided into some group

	• The students discussed with their group • The students were asked the make narrative text with their group
	Meeting 3 • The students presented their story with their group in front of class

3.7.3 Post-test

Post-test is forming a test that given after the students gets the treatment. In post-test the researcher get the data that will be a result data.

3.8 Method of Data Analysis

In analyzing data the researcher use t-test to measure which is round table technique is affective or not in improving students' narrative text writing. The researcher also uses SPSS application 4.0 versions to measure the data. T test is used in research with one factor two sample designs. One factor means there is only one factor contained in the research subject. This is following equation:

$$t_0 = \frac{\overline{x_1} - \overline{x_2}}{s\sqrt{\frac{1}{n1} + \frac{1}{n2}}}$$

Note:

t_0 = t statistic

$\overline{x_1} = mean\ of\ experiment\ class$

$\overline{x_2} = means\ of\ control\ class$

S = variants

n_1 = total students of experiment class

n_2 = total students of control class

(Sa'idah, 2017)

3.9 Statistical Hypothesis

Statistical hypothesis is hypothesis that are formulated statistically, this hypothesis is based on researcher observations (Sa'idah, 2017). Statistical hypothesis is presented in the form of numbers, whether the results obtained in testing on samples can be done in all populations. The statistical hypothesis of the study is expressed as follows:

1. If $-t_{table} \leq t_{value} \leq t_{table}$ the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected (Sa'idah, 2017). It means that there is no significant different between students' writing score on narrative text who taught by using round technique and who taught without round table technique. So, it that means round table technique is not effective to improve students' writing skill on narrative text.
2. If $t_{value} > t_{table}$ the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted (Sa'idah, 2017). It means that there is any significant different between students' writing score on narrative text who taught by using round technique and who taught without round table technique. So, it that means round table technique is effective to improve students' writing skill on narrative text.