CHAPTER III

RESEARCH METHOD

In this chapter the researcher present of research design, population and samples, research instrument, research hypothesis, validity and reliability testing, normality and homogeneity testing, data collecting method and analysis data.

A. Research Design

The design of this study was quantitative approach with pre-experimental design. Research design is all needed process in planing and conducting a research. According to Ary (2010:26), experiment research is a scientific investigation in which in investigator manipulates and controls one or more independent variable and observes the dependent variable or variable for variation concomitant to the manipulation of the independent variable. Cohen (2007:291) stated that an experiment involves making a change in the value of one variable called the independent variable and observing the effect of that change or another variable called the dependent variable. In this research, the dependent variable is writing text of recount, while the independent variable is Concept Sentence. Experimental research can be done in the laboratory, in the class and in the field. In this study, this experimental research have been done in the class with taking students as population.

This study used pre-experimental design because the researcher uses one class to conduct a research. The researcher also involved three steps in conducted a research: administering a pretest measuring the dependent variable, applying the experimental treatment using Concept Sentence based on the subject, and administering a post test, again measuring the dependent variable. The pretest and posttest were given to take the score of the student's achievement before and after being taught by using Concept Sentence. According to John W. Creswell (2009:160) the design of this research can be seen at the table below:

Table 3.1 The design of one-group pre-test post-test

Pre-test	Independent Variable	Post-test
X1	Y	X2

Explanation:

X1 = Pre-test

X2 = Post-test

Y =Treatment

Variable Y or independent variable of this research is Concept Sentence. It is because this method influences the students' ability, in this case is writing ability of recount text. The variable X or dependent variable is writing ability of recount text. It is because of writing ability is influenced by Concept Sentence.

The procedures of experimental research that use one group pre-test and post-test designs:

1. Administered a pre-test to measure writing ability of second grade of MTs Al Huda Kedungwaru.

2. Applied the experimental treatment in teaching writing ability by using Concept Sentence to the subject of second grade of MTs Al Huda Kedungwaru.

3. Administered a post-test to measure writing ability of second grade of MTs Al Huda Kedungwaru.

4. The schedule of the writing test and treatment

Table 3.2 The schedule

No	Day and Date	Activities
1.	Thursday, February 14th 2019	- Organizing tryout in second grade of B class
2.	Monday, February 18th 2019	- Conducting a Pretest in second grade of A class
3.	Thursday, February 21th 2019	- Treatment 1
4.	Monday, February 25th 2019	- Treatment 2
5.	Thursday, February 28th 2019	- Treatment 3
6.	Monday, March 04th 2019	- Conducting a Posttest

In this study, the researcher intended to investigate the effectiveness of using Concept Sentence in teaching writing ability at MTs Al Huda Kedungwaru. The aim of using a treatment is to prove whether increase score

possibly got by the researcher. Afterwards, the effectiveness of that treatment is known after the researcher check the significant score by giving students Concept Sentence in teaching writing ability of recount text.

B. Subject of The Study

1) Population

The population of this study included all the member of second grade in Junior High School. Population is generalizing region consisted of the object or subject having certain characteristic and quality specified by researcher to be learnt and later then pulled its conclusion (Sugiyono, 2006:80).

2) Sample

In this study the researcher used purposive sampling as the sample of the research. Sample is the part of amount and characteristic owned by the population. The sample of this research is students at eight A class that consist of 20 students where they are 10 male and 10 female at MTs Al Huda Kedungwaru in academic year 2018/2019. According to Ary (2010:649), sample is a selected portion of participants or subjects that is chosen for being observed in a research. Purposive sampling is sample that we choose by using a certain criteria. Purposive sampling was technique to determine sample with a particular consideration (Lodico 2006:7).

3) Sampling

The researcher used purposive sampling technique. According to Cohen et al (2007), purposive sampling technique is satisfactory to specific

need. In this research, the researcher chooses A class because of teachers' chosen. The teacher choses this class to give the treatments because this class was low in writing ability but they easy to be conditioned. Sampling is a process selecting unit from population. According to Frankel and Wallen (2009:90), sampling is a process of selecting sample who will participate in this research. While, Ary et al (2010:149) stated that sampling is indispensable to researcher.

C. Research Instrument

In this study, the researcher used test to collect data from the students. The type of test was essay. Test is a method that used to measure a person's ability or knowledge. The researcher looked at the score and indicate what subject that has the characteristic being measured.

1) Essay Test

In this research, the test was subjective form to measure of students' writing ability in recount text. Test is a process of measuring students' knowledge and ability to collect information of students. According to Ary et al (2006:201), test is a set of stimuli presented to individual in order to elicit responses on the basis of which a numerical score can be assigned. The tests were pretest and posttest. Before conducting pretest and posttest, the researcher gave try out in eight B class. Try out has purpose to measure validity and reliability of instrument before it applied in the research class. Then, the researcher conducted pretest and posttest in eight A class. The

researcher ensured that the pretest provided instructions which differ in form or wording from posttest, though the two tests must test same content.

The researcher set up analytic scoring rubric to assess the students' writing ability of recount text which include the criteria such as: (a) Content, (b) Organization, (c) Vocabulary, (d) Grammar, and (e) Mechanics. The researcher gave score in the students writing by using scoring guide of writing which can be seen in the following formula below:

Table 3.3 Scoring guide of writing

No	Aspect	Indicators	Scores
1.	Content	Main ideas stated clearly and accurately, change of opinion very clear.	20 (Good)
		Main ideas stated fairly clearly and accurately, change of opinion relatively clear.	15 (Average)
		Main ideas somewhat unclear and innacurate, change of opinion somewhat weak.	10 (Poor)
		Main ideas not clear and accurate, change of opinion weak.	5 (Very Poor)
2.	Organization	Well organized and perfectly coherent.	**20 (Good)**
		Loosely organized but main ideas clear, logical but incomplete sequencing.	**15 (Average)**
		Ideas disconnected, lacks logical sequencing.	**10 (Poor)**
		Not organize, incoherent.	**5 (Very Poor)**
3.	Vocabulary	Effective choice of words and use of idioms and word forms.	20 (Good)
		Adequate choice of words but some misuse of vocabulary, idioms, and word forms.	15 (Average)
		Limited range, confused use of words, idioms, and word forms.	10 (Poor)
		Very limited range, very poor knowledge of words, idioms, and word forms.	5 (Very Poor)
4.	Grammar	No errors, full control of complex structure.	**20 (Good)**
		Some errors, good control of structure.	**15 (Average)**
		Many errors, poor control of structure.	**10 (Poor)**
		Dominated by errors, no control of structure.	**5 (Very Poor)**
5.	Mechanics	Mastery of spelling and punctuation.	20 (Good)
		Few errors in spelling and punctuation.	15 (Average)
		Fair number of spelling and punctuation errors.	10 (Poor)
		No control over spelling and punctuation.	5 (Very Poor)

D. Validity and Reliability Testing

The data are correct or not are depend on the instrument of collecting method. There are two important requirements that have to fulfill, validity and reliability.

1) Validity

Validity was defined as the extent to which an instrument measured what it claimed to measure (Ary, 2010:225). The good instrument should be valid and reliable. Validity is the degree to which the test actually measures (Brown 2000:388).

    a. Content Validity

In this study the researcher used content validity because the test in this study was designed based on main competence and basic competence in Curriculum of 2013. A test is said to have content validity if it is contents constitutes a representative sample of language skill, structures, and etc. The researcher made the test based on blueprint of research. Content validity is validity in terms of the contents of the test. In this test, the researcher gave the writing test to measure writing ability in recount text, then the researcher asses the result of students using scoring rubric. The content validity in this research can be shown as below:

Table 3.4 Main Competence and Basic Competence in Curriculum of 2013

Core Competence	Basic Competence
3. Understanding, implementing, analyzing factual, conceptual, and procedural knowledge based on the curiosity towards science, technology, art, culture, and humanity with the knowledge of humanism, nationalism, and civilization related to the cause of phenomena of events, and implementing the procedural knowledge in a specific field according to the skill and interest to overcome the problem.	3.4 Analyzing social function, text structure, and language features in recount text related to the simple experience and events according to its context.
4. Analyzing, thinking, and performing in both concrete and abstract field related to the development of what has been learnt in school individually, and being able to use the method based on the theory in science.	4.6 composing simple written and spoken recount text about activity and event by concerning on the social function, text structure, and language features correctly according to its context.

b. Face Validity

A test is said to have face validity if it looks as if it measures what is supposed to measure. According to Ary (2010:228), face validity refers to which examines believe the instrument is measuring what it is supposed to measure. A test which does not have face validity may not be accepted by test-takers, teachers, and employers. So, face validity is hardly a scientific concept but it is very important.

In this research, the researcher designed the test to measure students' writing ability of recount text by consulting with the English teacher of MTs Al Huda Kedungwaru. This writing test also has been validated by the researcher's advisor.

c. Construct Validity

Construct validity deals with the relationship between a test and a particular view of language and language learning (Johnson 2001:303). In this research using writing test. In this writing test should have knowledge of sub-abilities about content, organization, vocabulary, grammar, and mechanics. The sub-abilities only can measure if the form of test is written. Thus, in pretest and posttest the students had to make a recount text. Posttest is conducted after the students got a treatment by using Concept Sentence. Therefore, this test has construct validity because the product of test in written.

2) Reliability

In this study, the researcher used writing test as an instrument to measure the result writing of recount text students in eight A class. The researcher conducted a try out before applied the instrument for pretest and posttest. Therefore, the researcher used students' score of try out to know the reliability of the of the instrument. Reliability is a process to measure the accuracy, consistency, and dependability of the test. According to Richard (2009:157) reliability refers to consistency of the score 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 uses IBM SPSS 21.0 for windows to know the reliability of instrument. The result of reliability testing by using IBM SPSS 21.0 can be seen from the table:

Table 3.5 The Result of Reliability

Reliability Statistics

Cronbach's Alpha	N of Items
.716	6

Ridwan (2004:118) devided the reliability instruments into five classes as follows:

1. If the alpha cronbach score 0.00 – 0.20: less reliable

2. If the alpha cronbach score 0.21 – 0.40: rather reliable

3. If the alpha cronbach score 0.41 – 0.60: enough reliable

4. If the alpha cronbach score 0.61 – 0.80: reliable

5. If the alpha cronbach score 0.81 – 1.00: very reliable

From the computation in SPSS, the reliability value of pre-test was 0.716. Based on the cronbach's alpha scale in the table 3.4 is valid because the value lied between 0.61 – 0.80. So it can be said that the instrument was reliable.

E. Data Collecting Method

Data collection method is an important aspect of the research. In this research, the researcher used one group pretest and posttest design that the data was collected during two week study, exactly from Thursday, 14 February 2019 until Monday, 04 March 2019 the students followed

instruction of the researcher in direct meeting. Data collection is all of process to collect data in the research (Fraenkel and Wallen, 2009:293).

1) Pretest

The researcher was used pretest as the first tested to analyzed the students' writing ability in recount text before giving a treatment and posttest. A pretest provided a measure on some attribute or characteristic that you asses for participants in an experimental before they receive treatment (Creswell:2003). The types of writing test is essay, exactly it was instruction. Pretest was done on Monday, February 18th 2019. The topic of pretest is holiday that decided by the researcher.

2) Posttest

A posttest is a measure on some attribute or characteristic that is assess for participants in an experiment after a treatment (Creswell, 2008:301). Post-test is done after the researcher gives the students a treatment by using Concept Sentence in writing ability. The type of questions is same with the pretest but different of the topic. The topic of posttest is very tired day. Posttest was done on Monday, 04th March 2019. Before the students already to do their writing on Concept Sentence, the researcher gave evaluation and feedback about their writing last week. The researcher analyzed the students' writing as final of the result of their writing.

F. Treatment of The Data

The researcher gave 3 times for treatment. Treatment here means the instructional to write the one text that the researcher use Concept Sentence method. Treatment was conducted on Thursday, February 21th 2019 until Thursday, February 28th 2019. Treatment was made the students to get the motivation, ideas or materials in writing a recount text. This is the schedule of treatment.

Table 3.6 The schedule of Treatment

The first treatment on Thursday, February 21th 2019

No	Aspect	Teachers' activity	Students' activity
1.	Pre-activity	✓ Greeting	✓ Give response of greeting
		✓ Check the attendance list	✓ Answering
		✓ Give the stimulation for students with the questions	✓ Answering the questions
2.	Main activity	✓ Introduction about Concept Sentence and explain the rules of Concept Sentence	✓ Pay attention to the researcher explanation
		✓ Explain the definition of recount text, generic structure, language feature and give an example of recount text	✓ Give the response of the explanation
3.	Closing	✓ Give the conclusion about the material	✓ Listen the explanation
		✓ Give the motivation and closing	✓ Give the response

The second treatment on Monday, February 25th 2019

No	Aspect	Teachers' activity	Students' activity
1.	Pre-activity	✓ Greeting	✓ Give response of greeting
		✓ Check the attendance list	✓ Answering
		✓ Give the stimulation for students with the questions	✓ Answering the questions
2.	Main activity	✓ Explain about action verb, chronological connection, and mechanic (punctuation, capitalization, and spelling)	✓ Pay attention to the researcher explanation
		✓ Make a group for students and do the task to write a recount text based on the topic "	✓ Follow the instruction of the researcher
		✓ Discussion	✓ Give response in discussion
3.	Closing	✓ Give the conclusion about the material	✓ Listen the explanation
		✓ Give the motivation and closing	✓ Give the response

The third treatment on Thursday, February 28th 2019

No	Aspect	Teachers' activity	Students' activity
1.	Pre-activity	✓ Greeting	✓ Give response of greeting
		✓ Check the attendance list	✓ Answering
		✓ Give the stimulation for students with the questions	✓ Answering the questions
2.	Main activity	✓ Explain about the generic structure and language feature	✓ Pay attention to the researcher explanation
		✓ Make a group for students and do the task to write a recount text based on the topic "	✓ Follow the instruction of the researcher
		✓ Discussion and give a comment about all of the materials	✓ Give response in discussion and the comment of the researcher
3.	Closing	✓ Give the conclusion about the material	✓ Listen the explanation
		✓ Give the motivation and closing	✓ Give the response

G. Data Analysis

The way to collect the data of pre-test and post-test score, the researcher analyzed the data by using statistical computation. The researcher would like to know the significant different on the students' score before and after taught by using Concept Sentence. Data analysis is a technique to analyze and identify the data which collected to know the result. The researcher using IBM SPSS 16.0 for windows to analyze paired-sample T-test.

There are some steps to analyze the data in SPSS. Firstly, the researcher input the data in SPSS to know the frequency of pre-test and post-test. The researcher finds the mean, median, mode, and standard deviation by using this application. Then, from comparing the data, the researcher knows the pair sample statistics and finally the researcher finds pair sample correlation from two-tail. After knowing the result of two-tail, the researcher gives the result whether or not the treatment by using Concept Sentence in students' writing ability of recount text is effective.

H. Research Hypothesis

From data analysis it could be identified that:

1) When the significant two-tail is more than level of significant 0.05 (0.00>0.05), the alternative hypothesis (Ha) is accepted. It means that there is significant different score on students' writing ability before and after being taught by using Concept Sentence.

2) When the significant two-tail is less than level of significant 0.05 (0.00<0.05), the null hypothesis (Ho) is rejected. It means that there is no significant different score on students' writing ability before and after being taught by using Concept Sentence.