CHAPTER III

RESEARCH METHOD

In this chapter, the writer presents research design, population and sample, research instrument, variable and data source, validity and reliability testing, data collecting method, and data analysis.

A.   Research Design

Research design played an important role in a research because the quality of research greatly depended on the design. In this research, the writer used experimental design.

Ary et al (2006:325) state experimental research is to enable researcher estimate the effect of an experimental treatment. In addition, according to Nunan (1992:47) states, "experiment is designed to collect data in such a way that threats to the reliability and validity of the research is ministered". In his research, the researcher was conducted in a pre-experimental design using quantitative approach with One-Group Pretest- Posttest design. In this study, the research will be done in the classroom with the sample has been obtained from a population.

Table 3.1 a diagram of One Group Pretest-Posttest design:

Y1	X	Y2
Pretest	Treatment (Independent variable)	Posttest (Dependent variable)

The procedure of Experimental research that use one group pretest-posttest design:

1. Administering a pretest with a purpose of measuring writing skill of the eighth grade students of SMP Hasan Munahir Karangan Trenggalek.

2. Applying the experimental treatment teaching writing by using inquiry method of the eighth grade students of SMP Hasan Munahir Karangan Trenggalek.

3. Administering a post-test with a purpose of measuring writing skill of the eighth grade students of SMP Hasan Munahir Karangan Trenggalek.

Difference attribute to application of the experimental treatment is determined by comparing the pretest-posttest of writing achievement. In this study, the researcher wants to know the effectiveness of using WH question toward students writing skill by experimental research. The effectiveness will be known after knowing the significant differences score between the students who are taught before and after using WH question technique.

B. Population and Sample

1. The Population

The populations of this study are all students of eighth grade of SMP

Hasan Munahir Karangan Trenggalek in academic year 2014/2015, in which total of class VII until IX were three class and this research just conducted in eighth grade that have one class. So the research took A class (VIII-A) as a sample of this research which consist of 13 students of eighth grade at SMP Hasan Munahir karangan. The students male consist of 7 students and the students female consist of 6 students. This is a populational study

C. Research Instrument

In a research in order to get the valid data which have high quality, therefore the instrument that was used must meet requirements as good instrument. Instrument is one of the significant steps in conducting this research. The instrument in this study is a test. The main instrument use of this study is writing test. The researcher subjected both pre-test and post-test as follows:

a.   Pre-Test

Pre-Test refers to a measure or test given to the subject prior to the experimental treatment. According to Wiersama (1991: 106), Pretest is gives to the students before they get a treatment. Pre-test was given before the treatments. The researcher came to the class, explained the material and told them what they had to do. Finally, the researcher asked the students to write on the topic have been learn (valuable experience based on holiday) before they were taught by using WH question technique.

b.   Treatment

      After giving a pre-test, the researcher gives the treatment to the students. The researcher applied the strategy or treatment using WH question technique is twice. Here the steps of treatment.

Table 3.2 Teaching Procedure of WH question technique

No.	Steps	Teaching Activities	Students Activities
1.	Opening	Greeting	Answer greeting
2.	Main teaching	• Introducing the material about Recount text • Giving explanation about the structure of recount text • Give examples of recount text	Pay attention
		• Give some list of questions that related the theme, that is writing personal experience story (holiday) • Example of question Who is on holiday?, when the holiday is caried?, where the holiday is held?, why hold a holiday?, what happens when the holidays?, how do you feel when the holiday?	• Students read the question that related the theme • The students answer these question about the theme

		• Then, the teacher give a piece of paper • Ask the students to write a personal experience story about holiday	• The students write in a piece of paper about the personal experience story (holiday)
3.	Closing	• Ask the students to collect his or her results. • Giving conclution about the lesson.	

c.   Post Test

According to Wiersama (1991: 106) Post-test provides a measure on some attribute or characteristic that someone assesses for participant after a treatment. Posttest was given after giving treatment in experimental research study or after teaching writing by using WH question. The posttest have done to get writing score of students after doing treatment. In this research posttest will be given to the student after they had been taught by using WH question in writing. The score was based on writing scoring rubric.

D. Variable and Data Sources

1. Variable

Variable is everything to which the researcher expects to find the

answer and that become point of research. Based on the title of the thesis, it has two variables;

a)   Independent Variable (X)

Independent variables is the variable is that consequence of or upon antecedent variable. In the field of education were identified as independent variables of which include methods of teaching, miscellaneous frequency (reinforcements), learning materials, etc.

This variable is often called as stimulus, predictor, and antecedent. Independent variable is a variable which influences and give special effects in dependent variable. Independent variable cannot stand by itself without dependent variable. Independent variable in this study is the use of Wh question technique.

b)   Dependent variable (Y)

Dependent variable is a response of variable that is presumed to be caused by the independent treatment or other independent variable. Called the dependent variable because they are dependent function of the independent variable. Are classified as independent variables in education is student learning outcomes of student, student learning readiness, student independence, etc. It is often called as output variable, criteria and consequent. Dependent variable is a variable that emerge in function relationship influenced by independent variable. Dependent variable in this research is the students' writing which is seen from their score.

 E. Validity and Reliability Testing

According to Ary (1985) research is always depend upon measurement. There are two important characteristic that every measuring instrument should process of validity and reliability.

1. **Validity**

Brown (2004:22) states that validity is the most complex criterion of an effective text and the most important principle of language testing. It is the extent to which inferences made from assessment result are appropriate, meaningful and useful in terms of the purpose of the assessment. The measure whether the test has a good validity, the researcher analyzed the test from content validity and face validity.

In this study, the researcher checked content validity and face validity, and the researcher asked the students to write about personal experience story (holiday).

a)   Content validity

Content validity is a kind of validity which depends on a careful analysis of the language being tested and of the particular test. A test is done to have content validity if its contents a represented sample of the language skill, structure, etc. The test have content validity if it includes a proper sample of the structure or content which is relevant with the purpose of the test. The content validity in this research can be showed as follows:

No	Indicator of competence achievement	Writing test
1.	Writing recount text about the	The students write in a piece of

	holiday.	paper about the personal experience story (holiday).

b)   Face validity

A test is said to have face validity if it measures what is supposed to measure. Face validity is hardly a scientific concept that is very important. A test which does not have face validity may not be accepted by test takers, teachers, educations, authorities or employers. In this test, there are some aspects that are consideration from this test to make a good test based on the validity.

1. The instruction must be clear for the students

2. In this test, the students be able to write the personal experience story about holiday.

3. Time allocation must be clearly. The teacher give 30 minutes to students write the story.

2.   Reliability

According Brown (2004:20) a reliable test is consistent and dependable, if the students are given the same test on two different occasions, the test should yield similar result. Reliability is the characteristic of very good test for it to be valid. A test must be reliable as a measuring instrument.

In this test, the researcher used intra rater reliability is where the researcher used only one rater scoring writing skill that is the writer self. The researcher analyzed the correlation of two scores by using Pearson

Product Moment and to analyze the correlation the researcher uses SPSS 16.0 for Windows.

From the correlation analyzing, the researcher got the correlation of two score. The value of score is 0,950. It means that the correlation of score 1 and 2 is very strong because the value is between 0, 80 – 1.000. From the evidence above, it was found that is test is very reliable.

F.   Data Collecting Method

A method of collecting data used in this research states writing test is a set of exercise or other instrument. The researcher is used two kind of test, those are pre-test and post-test. The researcher give writing test to know how well the students writing skill before and after being taught by using WH question.

 On 30 March 2015 came in the school and requested permission from the principal to conduct research toward headmaster of SMP Hasan Munahir Karangan Trenggalek. The researcher conducting first preliminary observes toward the students in teaching writing. On 31 March 2015, the researcher conducting the second preliminary observe and discuss with English teacher of SMP Hasan Munahir about the material and the technique that is used.

On 1 April 2015 and 2 April 2015, the researcher teach English writing without treatment and the researcher used worksheet as a source in teaching writing. On 3 April 2015, the researcher give pretest for the students to write the personal experience story about the holiday.

On 4 April 2015, the researcher give treatment for the students with a technique is WH question. On 6 April 2015, the researcher give second treatment for the students with a technique is WH question. On 7 April 2015 the researcher give posttest for the students to write the personal experience about the holiday related the WH question technique.

G.   Data Analysis

In this study, the researcher used a quantitative data analysis technique using statistical method. This technique used to find the significant difference on the students' writing ability before and after being taught WH question (pretest and posttest).

The first data (pre-test) is the score of students' writing before taught using WH question and the data result (post-test) of writing skill was data of average score of writing skill using WH question. To get the achievement of writing test, the writer give the student a test after the students get treatment by using WH question. If the post test of writing score test higher than pre-test, it means teaching writing using WH question is effective. The test was conducted by a short paragraph about a personal experience. To know the significant differences of the writing ability before and after taught using WH question, the researcher in this research uses paired sample T test at SPSS 16.0 for windows.