CHAPTER III
RESEARCH METHOD

This chapter will discuss about the method used by the researcher in conducting this study. The discussion will cover research design (a), population and sample (b), research instruments (c), validity and reliability testing (d), research variable (e), data collecting methods (f), normality testing (g), and data analysis (h).

A. Research Design

Research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue (Creswell, 2012:3). Research design is a strategy or way to arrange the setting of the research in order to get valid data. In this research, the researcher used experimental research. Ary (2010:26) defines that the experimental research involves a study of the effect of the systematic manipulation of one variable(s) on another variable. The manipulated variable is independent variable, and then the observed and measured variable is dependent variable. In this research, the independent variable was using outlining technique, while the dependent variable was students' achievement in writing recount text. Therefore, the treatment applied in this research was using outlining technique in teaching writing focused on recount text.

The type of experimental design in this research was pre-experimental design classified into one-group pretest-posttest design. It was because it only had one group as both the control and the experimental groups. Therefore, in the one group pretest-posttest design, a single group was observed not only after being given by a treatment, but also before. The experimental group would be conducted by using pretest before treatment and posttest for the result of treatment as instrument to collecting data.

According to Ary (2010: 304), the test illustration of one-group pretest-posttest design can be seen at table 3.1.

Table 3.1 The Test Illustration of One Group Pretest and Posttest Design

Pre-test	Independent variable	Post-test
Y_1	X	Y_2

X : Outlining Technique

Y_1 : Students' writing achievement before being taught by using Outlining Technique

Y_2 : Students' writing achievement after being taught by using Outlining Technique

The procedures of the pre-experimental research with one-group pretest-posttest design in this research were described as follows:

1. Administering a pretest (Y_1) which proposed to measure students' writing achievement before given a treatment.

2. Applying an experimental that was using outlining technique (X) to teach writing focused on recount text. After getting the scores on pretest, the researcher gave treatment by using outlining technique in teaching writing that focus on recount text. The researcher gave the treatment in eight meetings. In this research, the teacher was the researcher herself. There are some steps to conduct a treatment in experimental class. Those are:

   a. The teacher motivates the students and conveys the learning material that has been prepared by the teacher (recount text).

   b. The teacher explains about outlining technique.

   c. The teacher monitoring students make an outline before it developed into paragraph.

   d. Each of students is given a time (15 minutes) to make an outline.

   e. Students are asked to make an essay based on their outline about 25 minutes.

   f. After they finished, they can submit it.

3. Administering a posttest (Y_2) which proposed to measure students' writing achievement after given a treatment.

In this research, the researcher wanted to know the effectiveness of outlining technique towards students' writing achievement in recount text at the eighth grade of MTs Negeri Ngantru. The effectiveness was known after finding out significant difference between the student writing scores before and after being taught by using outlining technique. The significant difference was found out by comparing pretest and posttest scores.

B. Population, Sample and Sampling

A population is defined as all members off any well-defined class of people, event, or object (Ary, 2010: 148). It means that population is all subjects of the research. The population of this research was eighth grade students of MTs Negeri Ngantru. The total numbers of eighth grade students at MTs Negeri Ngantru were 280 students distributed into 6 class.

From the population above, the researcher takes a sample from a certain population, there was process called sampling. This research used non-probability sampling classified into purposive sampling as the process of taking sample. In purposive sampling also referred to as judgment sampling – sample element judged to be typical, or representative, are chosen from the population (Ary, 2010: 156). It means that the sample as the representative of population.

Sample is part of population of the object research (Arikunto, 2013: 174). The researcher was conducting a sample by using a purposive sampling. It means that this technique of sampling does not give opportunity for all

members in population to be chosen. The purposive sampling is technique to take sample with the motive. Sugiyono (2007:124) stated " Purposive sampling is technique to determine sample considerately". The researcher used purposive sampling because the researcher wanted the average ability class to be a sample. In this school only have one average ability class of the eighth grade which had the average score was 75, so it was taken as the sample consisted of 40 students. Thus in this research, the researcher took the VIIIB as a sample which consists of 40 students at MTs Negeri Ngantru. The group of sample was as the control and experimental group.

C. Research Instrument

Research instrument is the tool of collecting data that should be valid and reliable. The instrument in this research is test. According to Ary (2010: 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 type of test used in this research was achievement test. Achievement test is used to measure what individual students, group of students or the courses themselves have been in achieving objectives (Ary, 2010: 201). It means that the test has to represent the structure or skill that will be tested and it appropriate to the grade of the students that will be tested.

In constructing test to be used to test the students in pretest and posttest, the researcher had looked at the module that was used by the eighth grade students of MTs Negeri Ngantru at the second semester and consulted

the test to the expert, in this case the expert was English teacher that handled the eighth grade. After getting the agreement of teacher, the researcher tried out the test for 40 students at February, 27th 2016 in VIIIC class at MTs Negeri Ngantru before conducting the real pretest and posttest to know the reliability of instruments.

As stated previously, there were two types of test in this research, they were pretest and posttest. The test consisted of 1 questions in the form of writing an essay and the researcher allocated time was 40 minutes for the test in tryout it. After conducting the try out and getting the reliability of the tests, the researcher used this test as appropriate instrument to measure student's achievement in writing recount text in the form of pretest and posttest. Then, to assess student's writing, the researcher set up analytic scoring rubric which included the criteria such as (1) Content, (2) Organization, (3) Grammar, (4) Mechanic, and (5) Vocabulary. The complete form of the writing scoring rubric can be seen in the Appendix 1. Then, to assess the validity of the test, the researcher set up form of validation can be seen in the Appendix 2.

D. Validity and Reliability Testing

Test is a process of measuring students' knowledge and ability of the students, so the writer should make a good test. A good test must fulfill and consider standardized of test itself. Measuring a good test, there are some aspects to make a good test, those are: reliability and validity.

1. **Reliability**

   Ary (2010:236) defines the Reliability of a measuring instrument is the degree of consistency with which it measures whatever it is measuring. Reliability is concerned with the extent to which the measure would yield consistent results each time it is used. To have the reliable test, the researcher conducting the tryout. After conducting the try out, the researcher gets result to analyze the reliability of the test, that is:

Table 3.2 List Scores of Tryout

No	Name	Rater 1	Rater 2
1	AAPDL	56	60
2	APZ	56	64
3	AM	52	60
4	AR	60	60
5	ASM	64	68
6	AP	72	76
7	AA	68	72
8	BCL	76	72
9	DS	80	76
10	DS	60	64
11	EPR	64	64
12	FRW	60	68
13	FS	72	72
14	FRP	72	76
15	FSY	76	82
16	IR	72	76
17	LF	68	68
18	MS	64	68
19	MR	76	72
20	MKR	80	76
21	MCH	80	80
22	MARH	76	80
23	MRW	72	72
24	MFF	84	80
25	MAS	60	64
26	NLW	60	64
27	NK	64	68

28	RDS	68	72
29	RA	74	78
30	RNK	74	74
31	RLMH	72	78
32	RNYP	74	80
33	SAF	84	80
34	SJS	80	84
35	SW	68	72
36	TTP	78	72
37	TNS	72	76
38	VAD	84	80
39	YAN	80	80
40	YDR	68	76

To find out the reliability of the score obtained either from the try out's score corrected by the researcher and try-out's score corrected by the expert. Then, the researcher calculated two sets of score to get the correlation between them. The formula to find the correlation was *Person Product-Moment* in IBM SPSS Statistics 16. Table 3.2 shows the result of the try-out gained from the two raters, and followed by Table 3.3 showing the statistical calculation of *Person Product-Moment* from IBM SPSS Statistics 16.

Table 3.3 The Statistical Correlation of *Pearson Product-Moment*

Correlations

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1	.888[**]
	Sig. (2-tailed)		.000
	N	40	40

VAR00002	Pearson Correlation	.888**	1
	Sig. (2-tailed)	.000	
	N	40	40

**. Correlation is significant at the 0.01 level (2-tailed).

Perfect correlation, either positive or negative one, is respectively denoted with +1 or -1. Thus, the closer to 1, the stronger the correlation is (Choyimah, 2014:63). If it is closer to +1, it has strong positive correlation. On the contrary, if it is closer to -1, it has strong negative correlation. Referring to Table 3.4, it can be seen that the result of Pearson Correlation is 0.888. Thus, it indicates that the instrument had the strong positive correlation. To sum up, based on the result of statistical correlation either from try-out's score corrected by two raters indicating that the correlation was strong respectively positive, it could be concluded that the instrument in try-out was reliable.

2. Validity

Validity was defined as the extent to which an instrument measured what it claimed to measure. The focus of recent views of validity is not on the instrument itself but on the interpretation and meaning of the scores derived from the instrument (Ary, 2010:225). To measure whether the test has a good validity, the researcher analyzes the test from content validity, construct validity, and face validity.

a. Content validity

Content validity is about what actually goes into the test. The basic approach to determining content validity is to have teachers or subject matter experts examine the test and judge whether it is an adequate sample of the content and objectives to be measured (Ary, 2010: 235). It means that the test will have content validity if it includes a proper sample of the structure or content which relevant with the purpose of the test. It is obvious that writing test must be made up of items testing knowledge of writing.

Thus, content validity is the correspondence between curriculum objectives and objectives being assessed. The instrument of this research had a content validity because the test was designed based on Standard Competence – Basic Competence in KTSP 2006 arranged on test specification, which are:

Table 3.4 Test Specification of Pretest and Posttest

Standard Competence	Basic Competence	Indicators	Item
1.Mengungkapkan makna dalam teks tulis fungsional dan esei pendek sederhana berbentuk *recount* dan *narrative* untuk berinteraksi dengan lingkungan sekitar.	12.1. Mengungkapkan makna dalam bentuk teks tulis fungsional pendek sederhana dengan menggunakan ragam bahasa tulis secara akurat, lancar dan berterima untuk berinteraksi dengan lingkungan sekitar	• Siswa dapat melengkapi teks *recount* • Siswa dapat menyusun teks *recount* • Siswa dapat menulis teks berbentuk *recount* teks	Write a recount text consisting of three paragraph including orientation, event and re-orientation !
	12.2. Mengungkapkan makna dan langkah retorika dalam esei pendek sederhana dengan menggunakan ragam bahasa tulis secara akurat,		

	lancar dan berterima untuk berinteraksi dengan lingkungan sekitar berbentuk *recount* dan *narrative*.		

b. Construct Validity

Construct validity deals with the relationship between a test and a particular view of language and language learning (Brown, 2004:75). In this research, the test had high construct validity since it contained prompt in form of guided questions to measure students' skill in writing a recount text.

c. Face Validity

A test is said to have face validity if it looks as if it measures what it is supposed to measure (Hughes, 1989:27). In this test there were some aspects are considered from this test to make a good test based on the face validity. They are:

1) The instruction must be clearly for the students, so students are able to understand what they should do in the test.

2) In this test, the students of eighth grade were instructed to do the subjective test (related with writing recount text)

3) The consideration of time allocation must be suitable so that the students are able to supposed, when they finish their task before the time was up.

E. Research Variables

A variable is everything that will become that object of research or the influencing factors that will be studied. Variable is everything to which the researcher expects to find the answer (Arikunto, 2013:159). The variables examined in this experimental research are two classifications, here they are:

1. Independent variable

   Independent variable is called causing variable (Arikunto, 2013:162). In this research, the independent variable is the using of outlining technique.

2. Dependent variable

   Dependent variable is affected variable (Arikunto, 2013:162). In this research, the dependent variable is students' writing achievement in recount text.

F. Data Collecting Method

Data collecting method is the method to obtain data. Data of this research is collected by administering test. The data was collected by using two writing tests; pre-test, post-test. The technique of collecting the data was clarified as follows:

1. Pretest

A pretest provides a measure on some attribute or characteristic that you assess for participants in an experiment before they receive a treatment (Creswell, 2012: 297). At first meeting, the researcher gave

pretest to the 40 students of experimental group to measure their ability before treatment process. This test was given to know how far the students' ability in writing recount text. It determined the readiness for instructional program, and to diagnosed individual's specific strengths and weakness in writing recount text. This test consists of 1 questions in the form an essay related with recount text. Time allocation of the test was 40 minutes. The pretest was conducted on Tuesday, April 05th 2016.

2. Posttest

A posttest is a measure on some attribute or characteristic that is assessed for participants in an experiment after a treatment (Creswell, 2012: 297). Posttest was also given for 40 students of experimental group. The researcher conducted post-test after conducting the teaching writing through outlining technique as the treatment in the eighth grade students. It was done in order to know the student's development in writing recount text after having the treatment. The posttest was in the form of an essay related with recount text that consists of 1 questions. Time allocation was 45 minutes. The post-test was held on April 09th 2016. The researcher gave post-test after the students was given fourth treatment from the researcher.

Since the data was in the form of students' ability in the writing recount text, the data was collected by using two writing tests: pre-test and post-test. In this research, the researcher used test by gave outlining technique to measure the students' writing ability especially in recount text. The test was

given through an activity in doing the exercises related with the recount text in the form of an essay. The both student's score from pretest and posttest were analyzed to know their ability whether experimental class which is conducted a treatment has a significant score or not.

G. Normality Testing

Normality testing is needed to find out whether the data is in normal distribution or not. Choyimah (2014, 24) tell that the normality of data is important because the data can be considered to represent the population when it is in normal distribution. Therefore, the researcher intended to test the normality of the data by using SPSS 16.0 with One Simple Kolmogrov-Smirnov method. The normality testing was done towards the pretest and posttest scores.

The hypotheses for testing normality are:

a. H_0 : Data is in normal distribution

b. Ha   : Data is not normal distribution

The hypotheses for normality testing explain that the data is normal distribution if H_o is accepted and the data is not in normal distribution if H_a is accepted. The H_o is accepted when the significance value is higher than 0.05 ($\alpha = 5\%$), while H_0 is rejected when the significance value is lower than 0.05 ($\alpha = 5\%$).the researcher calculated normality of test by using SPSS 16.0 and the result for normality testing can be seen as follows.

Table 3.5 The Result of Pretest and Posttest in Normality Testing

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		40
Normal Parameters[a]	Mean	.0000000
	Std. Deviation	5.41496672
Most Extreme Differences	Absolute	.091
	Positive	.091
	Negative	-.084
Kolmogorov-Smirnov Z		.573
Asymp. Sig. (2-tailed)		.898

a. Test distribution is Normal.

Based on the output of One Sample Kolmogorov-Smirnov test in SPSS 16.0 at table 3.4 above, it is known that the significance value is 0.898. As stated previously, the hypotheses for normality testing explain that the data is normal distribution if H_o is accepted and the data is not in normal distribution if H_a is accepted. The H_o is accepted when the significance value is higher than 0.05 ($\alpha = 5\%$), while H_0 is rejected when the significance value is lower than 0.05 ($\alpha = 5\%$). Based on the data above, the significance value is 0.898 and it is higher than 0.05 (0.898 > 0.05). It means that H_0 is accepted and H_a is rejected. From the interpretation above, it can be concluded that the instruments in this research are in normal distribution.

H. Data Analysis

In this research, the researcher used a quantitative data analysis technique using statistical method. This technique is used to find the significance differences on the students' scores before and after being taught by using outlining technique. To know the effectiveness of outlining technique in teaching writing, the data was collected from students' scores in pretest and posttest. Then, the data which was gained from those two tests was analyzed by using *Paired Samples T-test* at SPSS 16.0. *Paired Samples T-test* is used when the samples are paired or correlated where each individual results in two data. In other words, the scores for pretest and posttest are correlated because those scores are got by one individual. If the result of t_{table} was bigger than $t_{obtained}$ at the level of significance 0.05, the null hypothesis could not be rejected indicating that outlining was not effective to increase students' writing skill in recount text. By contrast, if $t_{obtained}$ was bigger than t_{table} at the level of significance 0.05, the null hypothesis could be rejected indicating that outlining technique was effective to increase students' writing skill in recount text.