CHAPTER III

RESEARCH METHOD

This chapter describes about the research method used in conducting the research. In this case the researcher divided the research method into six parts there are research design, population and sample research instrument, valiity and realibility testing, data collection method, and data analysis.

A. Research Design

Research design is all process in planning and conducting the research. It is important to reach scientific truth for a research. This research is conducted in quantitative approach. According to Ary (2002: 22), quantitative approach uses objective measurement and stastical analysis of numeric ata to unerstan and explain a phenomena

This research is conducted in pre-experimental design using quantitative approach with one group pretest-posttest design. This research uses pre-experimental research design because the researcher can not determine the homogenity of students reading comprehension at Mts Ma'arif Bakung Udanawu. Therefore in this research the researcher takes only one group or class to use pre-test and post-test to know the result of treatment. In experimental, the researcher needs to know the cause effect between two variables . One group was obvserved before and after being exposed to a treatment. Pre- experimental researchinvolved

aministering pre-test to dependent variable, applying the experimental treatment to the subjects, and administering the post test.

The procedure of expeimental esearch that use on group pre-test post test design applied in this research are:

1. Administering a pretest before applying strategy with a purpose measuring reading comprehension of eight grade at MTs Ma'arif Bakung Udanawu.
2. Applying the experimental teaching reading by using Annotating Text as a strategy to the subjects (eight grade at MTs ma'arif Bakung Udanawu).
3. Administering a post-test after applying strategy with a purpose of measuring reading comprehension of eight grade students at MTs Ma'arif Bakung Udanawu.

Based on the research organized at eight grade students of Mts Ma'arif Bakung Udanawu Blitar it can be concluded that teaching students by using annotating text strategy is better to improve the students' reading comprehension ability. As stated by Porter-O'Donnell (2004) states that Annotating text strategy helps readers reach a deeper level of engagement and promotes active reading statement. Annotating text strategy is usually make predictions, ask questions, state opinions, analyze author craft, connections, and reflect on the content or their reading process. According to Erin Lynch (2018), Annotating a text is when the reader "marks up" a text to indicate places of importance or something they don't

understand. Sometimes students annotate by circling a word, underlining a phrase or highlighting a sentence. Annotating also includes writing notes in the margin; these notes might be thoughts or questions about the text. This process of annotating helps the reader keep track of ideas and questions and supports deeper understanding of the text.

Based on the research method, pocess of teaching learning divide into three steps. First step is giving pre test to know the students ability before being taught by using annotating text strategy. Second step is giving treatment to student. The teacher gave text on the blackboard and start explain how to use the strategy and make some example using the text. The treatment is applying annotating text strategy when the learning process recount text in the class. The students gave a text and understand the text by several process. The process is read the text and then start to gave mark up the text by underline, circle, and another symbol to know difficult vocabularies and summarize the main idea on the recount text.

The last steps is giving post test for the students to know the students' reading abaility after they gave the treatment in the class by using annotating text strategy. The relation this finding to the reality in the field is the theory of annotating strategy can support students deeper understanding of the text. The researcher knows the change of stuents during and after the treatment. It is known by the result of post test student after the researcher applied the treatment.

This research explains that annotating text strategy is useful in reading teaching and learning process. It does not only helpful for student but also help for teacher.

B. Population and Sample

1. Population

Population is all members of any well-defined class of people, events or subject this statement by Ary (2002: 163). The population in this research is the second grade students of Mts Ma'aif Bakung Udanawu. The populations in this research are all students of class VIII MTs Ma'arif Bakung Udanawu which consist of 387 students. They are devided into ten classes which are class A, class B, class C, class D, class E ,class F, class G, class H, class I and class J. Each class consist of around 40 students. According (R. Frankael 1996:91) a population is the group to which the results of the study are intended to applying.

2. Sample

Sample is part of the total number and characteristics belong the population. Sample is a part of population which will be analyzed. The sample in this research is students at eight H class that consist of 38 students, 24 for males and 14 for females of Mts Ma'arif Bakung Udanawu.

In this research, the researcher used purposive sampling technique. According to Ary et al (2010: 648) that purposive sampling technique is a type of non-probability sampling technique in which subject judged to be representative of the population include in the sample. By using purposive sampling, the expected criteria for samples obtained completely in accordance with the research to be conducted.

Choosing the sample is based on purposive sampling depends on what criteria are used. So first determined what criteria samples taken researchers took samples of class VIII. The researcher chose the class VIII-H at the sample because among other classes the students of the class VIII-H had average proficiency.

According to Arikunto (2006:109), a sample must be representative to a population. Based on Ary (2002:163) a sample is a group of a population. It means that good sample must be representative of the entire as possible, so that the generalization of the sample of this research. According to Sugiono (2010:118) Sampel adalah bagian dari jumlah dan karakteristik yang dimiliki oleh populasi tersebut, (sample is part of number and characteristic those set in the population). Population form a part of population representative population, so if the researcher find information on sample its mean that information was constituted from the sample. According to Sukardi (2007:54) stated that the important condition to attention in take sample is two kind, they are total of apparently adequate sample and the profile of sample must be representative sample. The researcher choose H class of second grade because according the

English teacher. Then, based on the English teache the characteristic of H class is students tend to be passive in learning reading activity.

C. Research Instrument

Instrument has important functions in this research. Instrument is one of the significant steps in conducting this research. Therefore, the researcher must choose an instrument because it is a tool used to measue natural phenomena or social will be observed. Research instrument is a tool of collecting data that should be valid and reliable.

According to Arikunto (2006:126) the device the researcher uses to collect data is called instrument. Instrument has important in this research. Instrument is one of the significant steps in conducting this research. The success of research is much decided by instrument used, because data which is need to answer research question and examine the hypothesis gained trough instrument itself. Instrument was constitute measurer that used to get quantitative information about variation of characteristics objectively (Hadjar, 1999:160).

The researcher used one kind of instrument that was reading test. The test is a method to gain the daby giving some questions to the respondent. The purpose to do test is to know Annotating Text Strategy effective or not for the students to learn reading compehension about recount text. The test was given

into two sections; firstly was pre-test which was conducted at 08th of April 2019 and secondly was post-test which was conducted at 10th of April 2019.

The test develope from K13 and syllabus which was used by Mts Ma'arif Udanawu and seeing the standard competence, basic competence, and topic that is used eighth grade level. After that, the researcher determine the topic or material that appropriate with this study. then, the researcher determined the objective of test is to measure and followed by making drafting in drafting the researcher designed a test. The test items for pretest consist of 20 questions of multiple choice. The pretest is given to students before the teacher being taught them by using Annotating Text Straregy. While the post test is given to the students after they are given the treatment.

According to Ary (2010:201) test is a set of stimuli presented to an individual in order to elicit responses on the basis of which a numerical score can be assigned. The test from researcher is to know the achievement of students.

The form of test is objective test that are multiple choices. The researcher requires 20 questions which is 20 multiple choices. The score treats them without any differences that means only one correct answer for each items. The test is use to measure the process that students making after learn something in achieving objects.

D. Validity and Reliability Testing

1. Validity

According to Ary, (1985:213) research is always dependent upon measurement. There are two important characteristic that every measuring instrument should passes: validity and reliability. Before using these test, a try out to 30 students to find out the validity and reliability of the test. 1. Validity. The validity of an assessment or tool indicates the extent to which it is an adequate measure of the curriculum and objectives it represent. The result of research is valid if the similarity between gotten ata an actually happened to research object. Valid instrument is tool uses to get the data. There are four types of validity; content validity, criterion validity, construct validity and face validity. In this research, the researcher analyzed the test from content validity and construct validity.

a. Content validity

   Based (Gay, 1992:155), content validity is the degree to which a test measures what is supposed to measure. In this study the test ha content validity because the test based on the course outline in the syllabus of second grade of Mts Ma'arif Bakung Udanawu.

a. Construct validity is testing that done to measure the behavior of students. Brown (2004:25) mentioned that a construct is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of perception. Based on the theory

above, in the test, the researcher asked the students to answer the question based on simple past tense to measure to the students' vocabulary achievement and fulfill the construct of vocabulary test and therefore valid in the term of construct validity. Basic decisions making in validity testing per items are as follows :

1. If the score of R hitung >R table in score signification 5%, then the test items is valid
2. If the score of R hitung < R table in score signification 5% , then the test items is not valid

The process calculation of validity testing by using SPSS 18.0 version for windows found the 20 questions test which had been tried out were valid. The result of validity can be seen as follow :

Table 3.1 The Result Construct Validity

No Items	T.Count	T.Table	Validity
Item 1	0.945	0.367	Valid
Items 2	0.578	0.367	Valid
Items 3	0.945	0.367	Valid
Items 4	0.578	0.367	Valid
Items 5	0.945	0.367	Valid
Items 6	0.863	0.367	Valid
Items 7	0.863	0.367	Valid
Items 8	0.402	0.367	Valid
Items 9	0.578	0.367	Valid
Items 10	0.863	0.367	Valid
Items 11	0.863	0.367	Valid
Items 12	0.945	0.367	Valid
Items 13	0.945	0.367	Valid
Items 14	0.578	0.367	Valid
Items 15	0.945	0.367	Valid
Items 16	0.945	0.367	Valid
Items 17	0.578	0.367	Valid
Items 18	0.945	0.367	Valid
Items 19	0.578	0.367	Valid
Items 20	0.863	0.367	Valid

2.Reliability

Reliability According to Howit and Cramer (2000:28) reliability is the extent to which the measure will give the same response under similar circumstances.. In other words, reliability shows a measure of consistency in

measuring the same phenomenon.. Sukardi (2007:122) stated that reliability is the level in the test in a consistent manner measure at any test. A research instrument can called reliability the tool was used what to use measure cab used in when and in any time, the result is same.

Ary at all (2002:250) states that reliability is concerned with the effect of such random errors of measurement on the consistency of scores. To measure that realibility of the test item, the research first oing tryout to another subject of sample will be used in this research. Tryout implemented to 40 students of eight H at Mts Ma'arif Bakung Udanawu. It is to know the instrument is suitable or not to check reliability. In this research, the researcher used SPSS.18. for windows to know the realibility of test instruments. According to Riduwan (2004:118), the criteria of reliability instrument can be divided into 5 classes as follows:

a. If the alpha cronbach score 0.00-0.20 : less reliable.
b. If the alpha cronbach score 0.21-0.40 : rathe reliable.
c. If the alpha cronbach score 0.41-0.60 : enough reliable.
d. If the alpha cronbach score 0.61-0.80 : reliable.
e. If the alpha cronbach score 0.81-1.00 : very reliable.

Table 3.2 The SPSS Reability Test

Reliability Statistics

Cronbach's Alpha	N of Items
.968	20

The calculated data above was applied to measure the reliability of the try out result. The try out was held on Thursday, 04th April 2019. Try out was conducted in order to measure the reliability and the validity of the instrument before conducting both pre-test and post-test. The researcher took VIII D class which became the sample of try out. Based on the results of reliability testing it can be seen from the reliable value in the Alpha-Cronbach column. If the significance value is > 0.6, the data can be said to be reliable. From the table above it can be seen that the Alpha Cronbach column shows a significance of 0.968 which means > 0.6 it means that the test is very reliable.

E. Normality and Homogenity Testing

1. Normality

Normality is conducted to determine wether the gotten data is normal distribution or not. To know the normality the researcher used SPSS.18. One- sample Kolmogorov-Smirnove test by the value of significance (α) = 0.050 rules as follow:

Table 3.3 Normality Result of The Data

One-Sample Kolmogorov-Smirnov Test

		pretest	posttest
N		38	38
Normal Parameters[a,b]	Mean	35.53	80.79
	Std. Deviation	10.830	10.560
Most Extreme Differences	Absolute	.112	.124
	Positive	.098	.109
	Negative	-.112	-.124
Kolmogorov-Smirnov Z		.692	.766
Asymp. Sig. (2-tailed)		.725	.601

a. Test distribution is Normal.

b. Calculated from data.

Based on the result of the test above. the probability number or Asymp. Sig (2-tailed) is obtained. This value is compared with 0.05 (in this case using a significance level or α = 5%) for decision making with guidelines:

a. Ho : If the value of significance > 0.050, means data is normal distribution.
b. H1 : If the value of significance < 0.050, means the distribution data is not normal distribution.

Table 3.4 The Decision of Normality Test

Name of Variable	Value Asymp. *Sig.(2-tailed)*	Level of Significant	Decision
pretest	0,725	0,05	Normal
posttest	0,601	0,05	Normal

2. Homogenity Testing

Homogenity testing is conducted to know wether the gotten data has a homogeneus variance or not. To know the homogenity the reseacher used SPSS Statistic 18. is Test of Homogenity of Variances by the value of significance (α) = 0.050. before doing homogenity testing, the researcher decides hypothesis in this homogenity as follows:

Table 3.5 The Homogenity Test

Test of Homogeneity of Variances

posttest

Levene Statistic	df1	df2	Sig.
1.131	6	28	.370

The basic of decision making in this homogeneity test is:

a. Ho : If the value of significance > 0.050, means data is homogeny.
b. H1 : If the value of significance < 0.050, means data is not homogeny.

Based on the table above, it is known that the Sig. student learning outcomes in the control class based on the value of the pretest and posttest is 0.370, that means the data on studens' learning based on the prestest and posttest values have the same or homogeneous variant.

F. Data Collection Method

The data collecting method is the method to obtain the data in the research. The aim of the data collecting in conducting scientific research was to get material that needed by the research. In this research, the researcher used achievement test. According to Hughes in Isnawati (2012:14) states that the purpose of achievement test is to establish how successful individual students, group of students, or the courses themselves have been in achieving objectives. This test used to measure students' achievement. In this research the ata collection method is administering test consist pre-test an pos test. The procedure as follow:

1. Pre test

   The first meeting the researcher give a pe test to the students. It was step to know students' score in reading comprehension before being taught the treatment. The pre test consist 20 items of multiple choice.

2. Post Test

   The post test is given to the students after conducting the treatment of using Annotating Text Strategy. To increase student's reading comprehension. Similarly pre test and post test consist of 20 items form multiple choices.

G. Data Analysis

According to Prasetyo (2008:184) stated that data analysis constitute of a continuation process from data processing to see how to interpret data, then analysis data from output at hand in processing data result stage. In this research the writer was used quantitative analysis.

Hasan (2006:30) said that Analysis quantitative is analysis that using statistic instruments, the instrument that use models like mathematic model. The result was given in numerical form then was explained and interpret in a descriptively. Analysis data quantitative also called statistic analysis. Statistic analysis is method to organize and analysis data quantitative or data that to need as data quantitative (Tanzeh, 2006:31).

Data analysis is a review of a series of activities, grouping, systematization, interpretation and verification of data so that a phenomenon has social value, academic, and scientific. The data obtained from research result is the result of student test that were analyzed quantitatively. Quantitative analysis was done using statistic which is called statistical analysis or inferential statistic. The data collected was processed by comparing with the fisrt data (pre-test) and the second data (post test) to see wether there will be significant difference after give by treatment. The analysis used is t-test analysis or independent sample t-test using SPSS 16.0 for windows program.

The steps of using SPSS are:

1. Convert the result data both pre-test and post test score of the students into the column of SPSS data view by copying the data the paste the data in the available table in 'data view'.
2. Click 'variable view', and then change the name of data 1 into Pre-Test and data 2 into Post-Test
3. Click 'data view' again, click menu 'analyze'.
4. Select 'Non-Parametric Tests'.
5. Then select '2 – Related Samples'.
6. . Move both of variables 'Pre-test' and 'Post-Test' to the right side by clicking icon . 
7. Next, give the sign √ in the column named Wilcoxon.
8. Then click OK. The data will be analyzed automatically and correctly.