

CHAPTER III

RESEARCH METHOD

This chapter describes the research method used in conducting the research. In this case the writer divided the research method into seven parts. They are research design, population and sample, variable, research instrument, normality and homogeneity validity and reliability, data collection method, and data analysis.

A. Research Design

In this research, the researcher is conducted in pre-experimental research. The purpose researcher was chosen this design because to finding the difference between students' score before and after being taught by using collaborative strategic reading (CSR) in pre and post one group. The researcher used one group pre-test and post-test. One single group to measured or observe before and after being exposed to a treatment. Only the students in experimental group are taught by using Collaborative Strategic Reading (CSR) during the reading process as the treatment of the study. The data are occupied from pre-test and post-test score. The design of this research can be seen at the table below:

Table 3.1 Test Pre-Experimental Design

Pre-test	Treatment	Post-test
Y1	X	Y2

The one group pre-test post-test design involves three steps:

1. Administering a pre-test to measure the dependent variable
2. Applying an experimental treatment X to the subject
3. Administering post-test again measuring independent variable

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

1. Administering a pretest with a purpose measuring reading comprehension in seventh grade in SMPN 1 Ngantru Tulungagung.
2. Applying treatment in teaching reading by using Collaborative Strategic Reading (CSR) as the strategy to the subjects (students of seventh grade at SMPN 1 Ngantru Tulungagung).
3. Administering a posttest after applying Collaborative Strategic Reading (CSR) with purpose of measuring score the students' reading comprehension of seventh grade students at SMPN 1 Ngantru Tulungagung.

There are some procedures of conducted the research :

1. Introduction step of research
 - a. Firstly, consultation with vice master of curriculum of SMPN 1 Ngantru Tulungagung and the English teacher. Consultation with Mrs. Aisyah S.Pd as vice master of curriculum and the English teacher is Mr. Paeran S.Pd about the time of conducting research, sample and population as the subject of the research and discussing about the sample that would be subject of the research and the suitable item writing card question.

- b. Making research instrument, test, to measure the effectiveness of CSR
 - c. Arranging lesson plan
 - a. Conducting validity and reliability of test
 - b. Analyzing the result of the test to know validity and reliability of instrument which is used as research instrument.
2. The implementation step of research

a. Pretest

The pretest was given to the students before researcher doing treatment. The purpose of it is to get score of the students before doing treatment. In pretest researcher give a test to the students consist of 20 multiple choice questions.

b. Treatment

1. The class is divided into several groups consist of 4-6 students each group.
2. The teacher give a text and ask students to *preview* the entire passage before they read each section. Previewing serves to motivate students interest in the topic.
3. Student *Click and clunk* while reading each section of the passage, this is to list new vocabulary from the text.
4. Students learn to *get the gist* to identifying the most important or main idea in a section of text.
5. Then, students learn to *wrap up* by formulating questions and answers about what they have learned and by reviewing key ideas. Finally students reports to the class the main ideas the group learned.

c. Posttest

Posttest was given to the students after giving the treatment. The purpose of doing posttest is to get reading score of the students after they are doing the treatment. In posttest researcher give a test to the students consist of 20 multiple choice questions.

B. Population, sample and sampling

1. Population

According to Sugiyono (2015:117) population is generalization region than consist of subject, subject have quality and certain characteristic who prescript by researcher for study to pull the conclusion. The population of this research is all of students from seventh grade in SMPN 1 Ngantru Tulungagung from class A until J class which consists of 332 students.

2. Sample and Sampling

Selected of the sample is very important step in conducting a research study. Sample is a part of population which will be analyzed. Sample taken from the population should be representative. The sample in this research is students at seventh C class that consist of 31 students; 15 male and 16 female. In this study researcher used purposive sampling technique. These samples were taken by taking the subject is not based on strata, random, region but based on their specific purpose

In this research, the researcher chooses C class because according to the English teacher. Then, based on the English teacher the characteristic of C

class is students tend to be passive in learning English especially for reading activity.

C. Variables

A Variable is a construct or a characteristic that can take on different values or score, variables and the relationships that exist among variables become the focus of the study by researchers (Ary et al 2010:37). There were two variables in this research, independent and dependent variables. The independent variable was the major variable to be investigated. This variable was selected, manipulated, and measured by the researcher. Meanwhile, the independent variable of this research was Collaborative Strategic Reading (CSR). The dependent variable was the variable that was observed and measured knowing the effect of independent variable. In this study, the dependent variable is students' reading ability in reading comprehension.

D. Research Instrument

Research instrument is tool of collecting data. Instrument is a tool used to measured natural phenomena or social will be observed (Sugiyono 2015:148). The instrument of this research is test. Arikunto (2006:127) states that test is a series, question, exercise or other means which used to measure the skill, knowledge, intelligent, ability or talent that have by individual or group. Thus a test is a method to gain the data by giving some questions to the respondent. The test was developed from K13 and syllabus which was used by SMPN 1 Ngantru Tulungagung and seeing the standard competence. After knowing the

standard competence, researcher developed some indicators that must be reached by the students. From those indicators, researcher developed the test that consists of two kind test; pretest and post test.

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

E. Validity and Realibility Testing

1. Validity

The result of research called valid if there is the similarity between gotten data and actually happened to research object. Valid instrument is measurement's tool uses to get data. Sugiyono (2014:121) stated valid is the instrument can be used to measure what should be measured. There are four types of validity; content validity, criterion validity, construct validity, face validity. In this research, the researcher analyzed the test from content validity and face validity.

a. Content Validity

Content validity is instrument organized as test, validity testing can be done with compare the instrument and teaching materials (Sugiyono, 2014:129). In this study the test had content validity because his test based

on the course objectives in the syllabus of first grade SMPN 1 Ngantru Tulungagung. This content validity can be showed as follow:

Table 3.2. Content Validity

Learning Objects	Type of Test	Test item
Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks deskriptif lisan dan tulis, sangat pendek dan sederhana, terkait orang, binatang, dan benda	Multiple Choice	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19
Menyusun teks deskriptif lisan dan tulis, sangat pendek dan sederhana, terkait orang, binatang, dan benda, dengan memperhatikan fungsi sosial, struktur teks, dan unsure kebahasaan, secara benar dan sesuai konteks.	Multiple Choice	20

b. Face Validity

Face validity is sometimes used in describing tests. Basically, face validity refers to the degree to which a test visible to measure what it purpose to measure (Gay, 1992:156). In this study the researcher wants to know the students' score in reading after given treatment. For the form of instrument or test in this research is objectives test, because objectives

test is palatable to this class, especially in seventh grade of junior high school.

2. Reliability

The way to know a good test is by reliability. Ary (2002:250) states that reliability is concerned with the effect of such a random errors of measurement on the consistency of the scores. Reliability is the consistency of the measurement, or degree to which an instrument measures the same way each time it is used under the same condition with the same subject.

To measure that reliability of test item, the researcher firstly gained Try out. It is to know whether the instrument suitable or not. In this research, the researcher used SPSS 16.0 for windows to know the reliability of test instruments. According to Sugiyono (2015:231) the value of cronbach's alpha can be interpreted as follow:

Table 3.3 Cronbrach's Alpha interpretation based on Sugiyono

Cronbach's Alpha	Interpretation
0,00 – 0,199	Less Reliable
0,20 – 0,399	Rather Reliable
0,40 – 0,599	Quite Reliable
0,60 – 0,799	Reliable
0,80 - 1,00	Very Reliable

From the answer of students' response in try out test, the researcher then analyze using reliability test based on Cronbach's Alpha. The result of reliability test was :

Table 3.4 Pre-test reliability

Reliability Statistics	
Cronbach's Alpha	N of Items
.945	31

Table 3.5 Post-test reliability

Reliability Statistics	
Cronbach's Alpha	N of Items
.918	31

From the computation in SPSS, the reliability value of multiple choice pre-test was 0,945 and value of post-test 0,918. Based on the Cronbach scale on the Cronbach value between 0,80-100 so it can be said that the instrument was very reliable.

F. Normality and Homogeneity Testing

Normality test are used to determine whether a data set is well-modeled by a normal distribution or not, or to compute how likely an underlying random variable is to be normally distributed. Normality test is intended to show that the sample data come from a normally distributed population.

To know the normality the researcher used *Kolmogorov-Smirnove test* by using SPSS 16.0. *Kolmogorov-Smirnove D test* is a test of normality for large samples. If the result are significant, then the null hypothesis of no difference between the observed data distribution and normal distribution is rejected. Simply put, a value

less than 0.05 indicates that the data are non-normal. The result can be seen in the table below:

Table 3.6 Normality

One-Sample Kolmogorov-Smirnov Test			Pretest	Posttest
N			31	31
Normal Parameters ^a	Mean		68.71	87.74
	Std. Deviation		7.299	8.351
Most Extreme Differences	Absolute		.151	.177
	Positive		.140	.177
	Negative		-.151	-.122
Kolmogorov-Smirnov Z			.840	.986
Asymp. Sig. (2-tailed)			.481	.285

a. Test distribution is Normal.

The result of normality test show that the test is normal, because the significant of pretest is 0.481 and the significant of posttest is 0.285 more than 0.05.

Homogeneity test is intended to show that two or more groups of data samples from population having the same variance. To know the homogeneity the researcher used *One way anova* by using SPSS. The result can be seen in the table below.

Table 3.7 Homogeneity Test

Test of Homogeneity of Variances			
Score			
Levene Statistic	df1	df2	Sig.
1.073	1	60	.304

Based on the result, the test is homogen because the significant show 0.304 it's more than 0.05.

G. Data Collecting Method

To get the data, the researcher proceeded with test. According to Arikunto (2010:193) test is sequence of questions or practice which used to measure skill, intelligence knowledge, ability or potency of someone or a group. In this research the data collection method is administering test that consist of pre test and post test. The procedure of administering test was clarified as follow:

1. Pre-test

As the first meeting, the researcher gave a pre test to the students. It was conducted to know students' score in reading comprehension before being taught the treatment. The test is given in order to know how far the students ability in reading comprehension of descriptive text. The pre test consist of 20 items in multiple choices.

2. Post test

The post test is given to the students after conducting the treatment of using Collaborative Strategic Reading (CSR) to increase students' reading comprehension. Similarly to pre test the post test also consists of 20 items in multiple choices.

H. Data Analysis

The researcher uses a quantitative analysis technique using statistical. The researcher uses the application SPSS Statistics 16 for windows to analyzed Paired-Sample-T-test. The reason of analyzed paired sample t-test because this research using one class in different kind of test (pre test and post test). Besides

paired sample t-test to know of using the interval data. There are some steps in analyzing data in SPSS 16. Firstly, the researcher input the data in SPSS Statistics to know the frequency of pre-test and post test score. After that by using this application, the researcher know the mean, median, mode, and standard deviation. Then, from the compare of the data the researcher know the pair sample statistics and finally the researcher find paired sample from two kind of the test. The researcher can be analysis about the result of significant two tails.

After the researcher knows the result of significant two tails from SPSS Statistics, the researcher can give the conclusion about the effectiveness or not about using Collaborative Strategic Reading (CSR) in Reading Comprehension of the Seventh Grade Student Junior High School. This technique is used to find the significant different on the student reading comprehension using CSR if the significant two tails is bigger than the level of significant (0,05), the alternative hypothesis (H_a) is rejected. It means that there is no significant different score of students' achievement before and after taught by using CSR. On the other hand, if the significant two tails is smaller than the level of significant (0,05) the null hypothesis is rejected. Indicating that there is different score of students achievement before and after taught by using CSR.