CHAPTER III

RESEARCH METHODOOGY

A. Research Method

The writer used experimental research for doing this research, especially quasi experimental design. Quasi experimental design is practical compromises between true experimental and the nature of human language behavior which wish to investigate. By using quasi experimental design control as many variables as we can and also limit the kinds interpretation we make about cause effect relationship and hedge the power of our generalization.[1] It is one approaches of research that two uses two groups; those experimental class and control class. Arikunto stated that generally, the research in experimental research uses two groups, experimental group as a group that gets the treatment and the control group that did not get treatment.[2]

The researcher implements Collaborative Strategic Reading (CSR) technique in the first Class and Grammar Translation

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[1] Evylyn Hatc, et.al., *Research Design and Statistic for Applied Linguistics* (Rowely; Newbury House Publisher, Inc),

[2] Suharsimi Arikunto, *Prosedure penelitian suatu pendekatan praktik*, (Jakarta: PT Rineka Cipta, 2006), 31.

Method is Implemented in the Second Class. This study focuses on giving treatment to the experimental class by applying Collaborative Strategic Reading in teaching reading, and the then researcher observes the result through classroom observation and test.

B. Population and sample

In this research the writer took the subject of the experimental research is the eight grade of SMPN 7 Kota Serang. The sample of research will be taken two class which consist of 80 students as sample and divided into two groups, each group consist of 40 students they are class H as experimental class and class G as control class. Because the researcher want to know how far the student's skill reading.

C. Place and Time

In this research the writer take place in SMPN 7 Kota Serang on Jl. Penancangan Baru No 36 Cipocok Jaya Kota Serang. The observation and research are since the writer get recommendation from the faculty or Tarbiyah Department until this research finish. From August 8th up to August 21th 2017; Focus on

students at the eighth grade which consist two classes. They are class 8.G as an experimental class and 8.H as a control class.

D. The Research Instrument

In this research, the researcher gives the students two test. There are pre-test and post-test. Teacher uses pre-test to students before treatment and teacher uses post-test to students after treatment. The result from the test that for teacher knows how the treatment can improve students skills especially reading comprehension.

The instrument that will be used by the writer is multiple choices and essay test. It will be done before treatment (pre-test) and after treatment (post-test). The test were given both to the experimental and controlled classes students'.

E. Data Collection and Data Analysis

1. Data Collection

After getting the data, researcher used the achievement test in the process of the collecting the data. The writer test is both the experimental group and the control group. The result of the test consist of pre-test and post-test.

In the pre-test researcher checks the equivalence of the experimental group and the control group. The pre-test of data analysis can be used to investigated the achievement of both groups after the treatment.

In the post-test, the data analysis does not need to check normal distribution and homogeneity of variances. Therefore the matched test directly used. Steps used it as in the pre-test and post test data analysis.

The pre-test of experimental group is represented by X1 and the control group presented by Y1.

2. Data Analysis

The researcher analyzed the result of the research by using t-test. The researcher uses two data. The first data is the result of pre-test and the second data is the result of post-test.

After getting the data from pre-test and post-test, the writer used formula t-test. It is one of statistic test that used to test the validity of null of hypothesis that in between two means of simple that randomly taken from the same population, there is significance different or not. t-test usually used for experimental method.

There are experimental class and control class. To compare the result of the experimental class and control class, the writer uses step as follow:

1. Determine mean of score experiment class (MX), with formula:

$$MX = \frac{\Sigma x}{N}$$

2. Determine mean of score control class (MY), with formula:

$$MY = \frac{\Sigma y}{N}$$

3. Determine the total square of error of experiment class (X), with formula:

$$\Sigma x^2 = \Sigma x^2 - \frac{(\Sigma x)^2}{N}$$

4. Determine the total square of error of control class (Y), with formula:

$$\Sigma y^2 = \Sigma y^2 - \frac{(\Sigma y)^2}{N}$$

5. Calculation T-test

   To calculate t-test, the writer used the formula stated by Suharsimi Arikunto as follows:

$$\frac{MX - MY}{\sqrt{\frac{(\Sigma x^2 + \Sigma y^2)}{Nx + Ny - 2} \cdot \left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

6. Determine the Degree of Freedom, with formula:

$$Df = Nx + Ny - 2$$

Notes:

MX	= Mean of experiment class.
MY	= Mean of control class.
Σx^2	= The total square of error of experiment class.
Σy^2	= The total square of error of control class.
N	= The numbers of subject.
Df	= Degree of freedom.

D. Hypothesis

1. Ha : There is significant effect of using Collaborative Strategic Reading on students' reading skills

2. Ho : There is no significant effect of using Collaborative Strategic Reading on students' reading skills