### **CHAPTER III**

### METHODOLOGY OF RESEARCH

### A. Research Method

In this research, the writer used quantitative research. According to Creswell, in quantitative research there are three design; experimental, correlation and survey. The writer applied quasi-experimental design in this research because it is good design that has control class as compare experiment class and intend to find out the application of collaborative strategic reading to improving reading comprehension on hortatory exposition text. According to Millan, the purpose of quasi experimental design is to determine cause and effect between independent and dependent variable. A common situation for implementing quasi-experimental study involves several classes or schools that can be used to determine the effect of curricular materials or teaching methods.

Sugiyono stated that the researcher in experimental research uses two groups, experimental group as a group that gets the treatment and the control group that did not get treatment.<sup>3</sup>

In this research, collaborative stategic reading is the independent variable which may improving reading comprehension on hortatory exposition text as the dependent variable. The writer takes two classes and used pre-test and post-test

<sup>&</sup>lt;sup>1</sup>John W. Creswell, Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research-Internasional Edition, (Boston: Pearson, 2002),p.12

<sup>&</sup>lt;sup>2</sup>James H. McMillan, Sally Schumacher, *Research in Education Evidence-Based Inquiry 6th Edition*, (Boston: Allyn and Bacon, 2006), p. 24.

<sup>&</sup>lt;sup>3</sup>Prof. Dr. Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R&D*,(Bandung: Alfabeta,2014), p. 76

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on the control and experiment class. The experiment class was given collaborative strategic reading in the classroom and the control class by usual approach. This

O1: Pre-test

design can be represented as follow:

O3: Pre-test

O2: Post-test

O4: Post-test

X: Treatment

---: The class are not randomly formed

The writer conduct this research at least 5-6 meetings. It consist of introduction, pre – test, gives the lesson using usual approach, gives the lesson using collaborative strategic reading, post – test to know whether there is improvement or not.

The application of Collaborative Strategic Reading can be seen from the improvement of students' score of experiment class in the post-test. The score was taken by the writer after student had been given some treatments and from the comparison of both classes.

#### **B.** Place and Time of Research

This research takes SMA Negeri 11 Pandeglang as the place of the research. It is located on Jl. Raya Menes- Jiput Km 3,5 Simpang tiga Nanggung kab. Pandeglang prov. Banten. The writer chooses this school because the writer

has known well about the condition of this school and mostly of students have opinion that English lesson is very difficult lesson to learned especially in reading text. The students think that reading text is complicated to understand and they also scares because meaning and letters are different. Therefore, the write would conduct the research as well as accurate and to find the best way of teaching English that can assist student's reading comprehension.

### C. Population and Sample

## 1. Population

According to Arikunto "Population is the whole of research subject" and strengthen by Nunan's opinion, "population is all case situations, or individuals who share one more characteristics." It means that population must be whole of research and should not be partially, and all case situations.

The population of this research is second grade of SMA Negeri 11 Pandeglang. The population of this research consist of 73 students. The researcher choose the second grade because reading skill is the crucial skill for them in the preparation of facing the national examination in the third class.

### 2. Sample

According to Arikunto, sample is a subject of individuals or cases from within population.<sup>6</sup> In this research, the researcher choose XI IPA 2 as the experimental class consist of 37 students, and XI IPA 3 as the control class consist

<sup>&</sup>lt;sup>4</sup>Suharsimin Arikunto, *Prosuder Penelitian Suatu Pendekatan Praktik*, ( Jakarta: Rineka Cipta, 2006),p.173

<sup>&</sup>lt;sup>5</sup>David Nunan, *Research Method in Language Learning* (Cambridge: Cambridge University Press, 1992),p.231

<sup>&</sup>lt;sup>6</sup>Arikunto, *Prosuder Penelitian Suatu Pendekatan Praktik*, p.174

of 36 students. The researcher choose those class because according to English teacher in that school those class is appropriate to become the object of this research.

### D. Research Instrument

Every research needs some instrument to collect data. In this research, the writer get the data from the test. These are pre- test and post- test to investigate the both of variables, achievement tests are used in this study. The research instrument that used in this research is a multiple choice that consists of 20 items and essay that consist of 5 items.

## E. The Technique of Data Collection

In this research, the writer takes the test as technique of data collecting.

The writer uses pre-test and post- test to measuring students' improvement in reading.

### 1. Pre-test

Pre- test is a test for measure reading skill student before giving treatment. Firstly researcher ask students to read some of hortatory exposition text then they should answer the question. There is 20 question of multiple choice.

#### 2. Post-test

Post – test is test for measure reading skill student after giving treatment by using Collaborative Strategic Reading. The procedure of post-test is same

with pre- test. The difference is from the question that consist of 20 questions of multiple choice and 5 questions from essay.

# F. The Technique of Data Analysis

In this research, the writer used formula to find out the significant of application of collaborative strategic reading (CSR) to improving reading comprehension on hortatory exposition text. To analyzing data use t-test, there are several step in analyzing the result of the test:<sup>7</sup>

1. Determine the standard deviation, as follow:

$$SD_{D} = \sqrt{\frac{\sum D^{2}}{N} - \left(\frac{\sum D}{N}\right)^{2}}$$

2. Determining mean of difference (MD) to get the result of the pre test and post test:

$$M_D = \frac{\sum D}{N}$$

3. Determining the mean of differences ( $SE_{MD}$ ) between X variable and Y variable, by formula:

$$SE_{MD} = \frac{SD_D}{\sqrt{N-1}}$$

4. Determining the degree of freedom:

$$Df = N - 1$$

5. Determining the result of to:

$$t_{\rm o} = \frac{M_D}{SE_{MD}}$$

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<sup>&</sup>lt;sup>7</sup> Drs. Anas Sudjono, *Pengantar Statistik Pendidikaan*, (Jakarta:PT. Raja Grafindo Persada, 2000), p.300