#### **CHAPTER III**

#### METHOD OF THE RESEARCH

#### A. Research Method.

In this study, the researcher using experimental research. According to Sugiyono experimental research method can be interpreted as the research methods used to find a specific treatment effect against the other in uncontrolled conditions. This means no treatment in experimental studies to determine the effect arising from the treatment. In this study means that researchers seek effectiveness that would result from the using of chain pictures technique in teaching speaking.

The approach used in the study of this time is experimental quantitative method. According to Creswell.<sup>2</sup> Said that some quantitative research intends to explain the effect of particular variable toward another variable which only can be done by explaining the relation between each variable. Meanwhile, the research design being used in this study is quasi experimental design. Form this experimental design is the development of a true experimental design, this design has the control group, but not able to function fully to control external variables that affect the implementation of the experiment. However this design is better than the pre-experimental design. Quasi-experimental design, used since in fact difficult to obtain the control group used for the study. In this study researchers used a type of design

<sup>&</sup>lt;sup>1</sup>Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, Alfabeta, Bandung 2011, p72

<sup>&</sup>lt;sup>2</sup>John W Creswell, Research Design (Qualitative Quantitative and Mixed Methods Approaches), Sage Publication, India 2014

nonequivalent control group design. This design is almost the same as the pretest-posttest control group design, only in this design the experimental group or the control groups were not chosen at random.<sup>3</sup> Type of experiment of the research is quasi experiment. This design is represented as follow:

Where:

R1 : Experiment Group R2 : Controlled Group

O1 : Pretest O2 : Posttest

X: Treatment

In the first phase, experimental method haves required the two groups. The first group is experimental group that is class XI IPA 5 and next is control group that is class XI IPA 6. For the group of experimental, the writer will apply the chain picture in teaching speaking, while for the control group the teacher does not use chain picture.

Therefore, based on that statement, in this study the writer conducted the observation twice: the observation which is done before the treatment called as pre-test and the observation which is done after the treatment called post-test. The kind of treatment in this study is teaching speaking using "chain picture technique".

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

In this research the researcher take place at SMA Negeri 5 Kota Serang. It is located at Jl. Ayip Usman No. 26 Kaligandu, Kecamatan

<sup>&</sup>lt;sup>3</sup>Sugiyono, Metode Penelitian Kuantitatif, Kualitatif, dan R&D, p77-79

Serang, Provinsi Banten. The time of the research is around 3 months start at February until Juni 2017.

## C. Population and Sample

## 1. Population

According to Sugiyono "Population is generalization region consisting of: objects / subjects that have certain qualities and characteristics defined by the researchers to learn and then drawn conclusions".<sup>4</sup>

The target population in this study is actually the eleventh grade students of senior high school. In connection with the above definition, then the population in this research students of class XI SMA Negeri 5 Kota Serang in academic year 2016/2017. It consists of ten classes namely XI IPA 1-6 and XI IPS 1-4 with the total number of students are 369 students.

## 2. Sample

The sample is part of the number and characteristics possessed by the population. For technique sampling, researcher use purposive sampling because its looked by the purpose the research that need two classes for control class and treatment class.

In this research, the researcher take two classes as sample are class XI IPA 5 as a class experiment with a number of 36 students and class XI IPA 6 as the control class with the number of 36 students. Then, it can be seen that this sample amounted to 72 students.

<sup>&</sup>lt;sup>4</sup>Sugiyono, Metode Penelitian Kuantitatif, Kualitatif, dan R&D, p80

#### D. The Research Instrument

#### 1. Observation.

The researcher used the observation checklist to make it more systematic, containing list of students' activities and response or happening which might happen. Observation is intended to see and to know about the condition of class and students. Process of teaching and learning through chain pictures to know the obstacles appear during teaching learning process, the students' motivation, to see their difficulties, their problem, and their understanding about the material given that can be seen from their attitude, behavior, and response.

Before doing the research, the writer does the observation directly to the school that becomes the place of this research and also to the population who becomes object of this research. The object of this research consists of the students activity.

The purpose of this observation is to get some factual information about teaching learning activities and how is the students' response in learning English. The observation sheet is attached (Appendix 8).

In this study, researchers used direct observation of the study site in class XI IPA, students motivation, process of learning and teachers competence at SMA Negeri 5 Kota Serang.

#### 2. Lesson Plan

Lesson plan is used for treatment process. The purpose is to make systematical learning process. The lesson plan is attached (Appendix 1)

# 3. Scoring Sheet

Scoring sheet is used to make the writer know about students' ability especially in speaking. After testing, the writer has to measure and score the result of the students' testing in order to analyze the test that was given by the writer. Based on Arthur Hughes the scoring sheet as follow:<sup>5</sup>

	The rating sheet of speaking test
Name:	
Class :	

Table 3.1

The Criteria of students' score

Conversational English Proficiency weighting table

Weighting table							
Proficiency description	1	2	3	4	5	6	Score
Accent	0	1	2	2	3	4	
Grammar	6	12	18	24	30	36	
Vocabulary	4	8	12	16	20	24	
Fluency	2	4	6	8	10	12	
Comprehension	4	8	12	15	19	23	
Total							

<sup>&</sup>lt;sup>5</sup> Arthur Hughes, *Teaching for Language Teacher*, 133

Letter	Score	Description
A	82-99	Very Good
В	65-81	Good
С	50-64	Enough
D	33-49	Less
E	16-32	Low

## **E. Data Collection Techniques**

The techniques of collecting data in this research are test and observation. In order to get valid information that will support the researcher. She uses test and observation for knowing result study of speaking before and after using chain pictures. The data collection process is nothing other than a doubling of primary data for research purposes. The collection of data is a systematic procedure and standard to obtain the necessary data. In accordance with the necessary data in this study, the technique Data collection in this study include:

#### 1. Test.

Test is an instrument or procedure designed to elicit performance from learners with the purpose of measuring their attainment of specified criteria. The researcher tests for knowing result study of speaking skill before and after using chain pictures.

#### a. Pre-test

The writer use pre-test for knowing the skill of the students before use chain pictures, the test is use some topics that students can choose one of the topics from four topics and make dialogue from that topic which contain asking and giving advice, then students practice the dialogue in front of the class. In this study, the test given for class XI IPA 5 and XI IPA 6 at SMA Negeri 5 Kota Serang.

#### b. Post-test

The writer use pre-test for knowing the skill of the students after use chain pictures, the test is use some topics that students can choose one of the topics from three topics and students make dialogue from that topic which contain asking and giving advice, then students practice the dialogue in front of the class. In this study, the test given for class XI IPA 5 and XI IPA 6 at SMA Negeri 5 Kota Serang.

#### 2. Documentation

Documentation method which collects data to see or noted a report that is available. This method is done by see the official documents like the pictures.

## F. The Techniques of Data Analyzing

The technique on the quasi experiment research is comparing the students' result score from pre-test and pos-test. According to Anas Sudijono, to find out how significance the effect of using chain pictures in teaching speaking, the writer used statistic calculation of the t-test to determine the final calculation of  $t_0$  (t observation) that done to measure the final score of the research test.

The steps for statistic analyze that are:<sup>6</sup>

# 1) Determining mean of variable x1 with formula

<sup>&</sup>lt;sup>6</sup>Anas Sudijono, *Pengantar Statistik Pendidikan*, PT Raja Grafindo Persada, Jakarta, 2014. P.314

$$MI = \frac{\sum X1}{N1}$$

2) Determining mean of variable x2 with formula

$$M2 = \frac{\sum X2}{N2}$$

3) Determining derivation score variable x1 with formula

$$x_1 = X_1 - M_1$$

4) Determining derivation score variable x2 with formula

$$x_2 = X_2 - M_2$$

After collecting the data from the observation of pre-test and post-test, the data analyzed and processed by using statistic calculation of the t-test formula with the significance degree 5% and 1% (0, 05 0r 0, 01). The formula of t-test using fisher formula is as follow:

$$t = \frac{M_1 - M_2}{\sqrt{\left\{\frac{\sum X_1^2 + \sum X_2^2}{N_1 + N_2 - 2}\right\}\left\{\frac{N_1 + N_2}{N_1. N_2}\right\}}}$$

Notes:

 $M_1$  = Mean score of the experiment class

 $M_2$  = Mean score of the control class

 $\sum X_1^2$  = Sum of square deviation score in experiment class

 $\sum X_2^2$  = Sum of square deviation in control class

 $N_1$  = Number of students of experiment class

 $N_2$  = Number of students of control class

2 = Constant number

df = Degree of freedom df = (N1 + N2) - 2

#### G. Research Procedure

In general, the procedure of this research can be described as follows:

- 1. Observation the English teaching activity.
- 2. Provide pre-test of the experimental class and controlled class.
- 3. Provide treatment to the experimental class using chain pictures, while the controlled class without using chain pictures.

# a. Experimental Class

- 1) Preparation
  - -Preparing the lesson plan.
  - -preparing the material.
  - -preparing chain pictures media.
- 2) Implementation
  - -Teacher explains the material.
  - -Teacher gives the example.
  - -Guides students to use chain pictures when practice speaking.
  - -The teacher gives feedback.

#### b. Controlled Class

- 1) Preparation
  - -Preparing the lesson plan.
  - -preparing the material that will be learnt.
- 2) Implementation
  - Teacher explains the material.
  - -Teacher gives the example.
  - The teacher asks students to speak in front of the class.
- 4. Provide post-test to the experimental class and controlled class.
- 5. Analyzing the data from pre-test and post-test.
- 6. Drawing the interpretation based on the result of the analysis of data and making conclusion.

Treatment for Experimental Class as follow:

## Mobile Phone Should Not Be Banned in School [Title]

The phone is not used just for calling, but sending text, taking pictures, accessing internet, and more. Many students bring their phones to school. For them, the phone has many uses. So, mobile phones should not be banned at school. Why do I say that? [Thesis]

First, students contact their parents for other needs. With mobile phones, students can call or their close relatives if they need something to take to school. In addition, mobile phones can be used to call their children when one of their families is hit by a sudden disaster. And

then, students can be called their parents to pick them up when they want to go home. [Argument]

Second, increasing knowledge among students. While trying to find answers to difficult tasks in school, the phone can be used as a link to find answers via GPRS or WiFi networks. [Argument]

Finally, expand the network of friendship among students. School is the right place to make friends. On average, students are in school about 7 hours or more. Thus, many students found their friends in the school environment. Therefore, communication between friends should be stored on the mobile phone. [Argument]

So, I think mobile phones should not be banned at school. But, use the phone at the right time and place so no one is bothered. [Recommendation]

## Chain Picture Related material above









