### CHAPTER III

### METHOD OF INVESTIGATION

### A. Research Design

# 1. Design of Research

This study was classroom action research. Karen Goodnough states that classroom action research is research conducted by teacher to systemically improve learning goal by solving some issues related educational context.<sup>43</sup>

Action research is a research which is done by someone about what he does without changing the implementation. The researcher does an experiment that observed continuously, considered the advantages and the disadvantages, and held the controllable change to the proper activity.<sup>44</sup>

According to Wallace, action research is collecting data from teaching experience to shape the future move. It

<sup>&</sup>lt;sup>43</sup>Karen Goodnough, Taking Action in Classrooms Through Collaborative Action Research, (Rotterdam: Sense Publisher), P.11

<sup>&</sup>lt;sup>44</sup>Suharsimi Arikunto, *Prosedur Penelitian : Suatu Pendekatan Praktik* (Jakarta: Rineka Cipta, 2013) P.8

involves the systematic collection and analysis of data related to the practice.<sup>45</sup>

From the explanations above, it can be concluded that classroom action research is research that is done by teacher to solve problem occurred in learning process through an action. The research is appropriate to improve teaching learning process.

#### Characteristic of Classroom Action Research.

The characteristic of classroom action research according to Suyadi: Problem class should be solved, teacher realizes that there is problem that comes up and needs to be settled. Therefore, conducting classroom action research is the way to find and to solve the problem. Self-reflection, self-reflection done by teacher to look back what done during teaching learning process. Then, problem can be found. It takes place in the class, the research should be held in a place where holds interaction between students and teacher in teaching-learning process.<sup>46</sup>

<sup>&</sup>lt;sup>45</sup> Michael J. Wallace, *Action Research for Language Teachers*, (Cambridge: Cambridge University Press, 1998), P. 16

 $<sup>^{46} \</sup>mathrm{Suyadi},$  Panduan Penelitian Tindakan Kelas, (Jogjakarta: Diva Press, 2010), P.23

The characteristic of classroom action research is teacher as a researcher; there must be problem to be solved, and self reflection. The aim is to change things in learning process.

## 3. The Steps of Classroom Action Research

In this study, the researcher conducted two cycles of classroom action research. There are four steps process in each cycle of research. The following steps explain the process above.

## a. Planning

In this step, researcher set a plan by focusing on who, what, when, where, and how the action would be done. The researcher prepared documentations such as lesson plan, students name list, and etc.

# b. Acting

In this step, the teaching strategy was applied in teaching learning process. It was using whole brain teaching (WBT) method to enhance students' understanding in teaching speaking skill on preferences.

## c. Observing

In this step, the researcher observed and took notes during teaching learning process. This was to determine whether the acting activity had any progress in each cycle.

# d. Reflecting

The final action was reflecting the result of the observation done by teacher and researcher, analysis and evaluation are included.

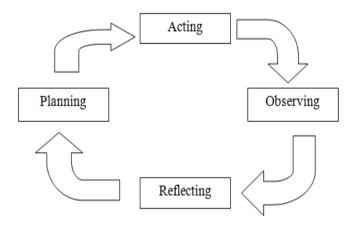


Figure 1. Action Research Cycle

# B. Setting of the study

The action research took place in SMK MA'ARIF NU 01 Semarang. It is located in Wonolopo, Mijen – Semarang. The research was conducted on March-April 2016 at the tenth grade students of SMK Ma'arif NU 01 Semarang in the academic year of 2015/2016.

## C. Subject of the study

The subject of this research is the students of the tenth grade of SMK Ma'arif NU 01 Semarang. There were five classes in this grade. X PS 1 was chosen for this research. It consists of 25 students.

#### D. Collaborator

Collaborator in the classroom action research was someone who helped the researcher to collect the data. The collaborator in this research was the English teacher who taught English lesson in the school. She was Mrs. Libasut Taqwa, S. Pd.

# E. Data collection technique

#### 1. Documentation

The researcher used documentations which related to this research. There are students' name list, students' English mark, students' worksheet and photo of teaching and learning process by Whole Brain Teaching (WBT).

### 2. Observation

Researcher observed class situation, students' response and attitude, tasks, and their difficulties during teaching learning process. In conducting this classroom action research, the researcher decided to use observation form.

### 3. Test

The researcher examined students' understanding in learning expressing preferences through oral test. It would be tested in pre-cycle, cycle I and cycle II.

## F. Techniques of Data Analysis

The aim of this study was to find out whether Whole Brain Teaching (WBT) method was effective to improve students' speaking skill at Preferences. There were pre-test and post-test, these tests were used to measure the students' progress in mastering preferences in speaking skills. The steps of data analysis are:

## 1. Analysing Observation Checklist

Observation checklist is used during the teaching and learning process in preliminarily research, cycle I, and cycle II.

Then the result of observation checklist is analysed by calculating the percentage as following.

Percentage 
$$\% = \frac{n}{N} x 100\%$$

n = the score of students

N =the sum of total score

% = the percentage of the expectation.

From the formula above student's participation can be categorized as follow:

#### a Poor

The aspect of activity reaches about 20% from overall percentage 100%.

### b. Fair

The aspect of activity reaches out for about 21-40% from overall percentage 100%.

## c. Average

The aspect of activity reaches out for about 41-60% from overall percentage 100%.

#### d. Good

The aspect of activity reaches out for about 61-80% from overall percentage 100%.

### e. Excellent

The aspect of activity reaches out for about 81-100%.

## 2. Method of Analysing Test

When the researcher gave treatments using Whole Brain Teaching (WBT) method, the researcher determined the test results that are measured by using the formula as follows:

## a. Measuring The Mean

After calculate the percentage of students score, the researcher calculated the mean to measure the improvement of students score in every cycle. The mean is the arithmetical average which is obtained by adding the sum offset score and dividing the number of students.<sup>47</sup>

$$\frac{-}{X} = \frac{\sum fX}{n}$$

 $\overline{X}$  = the mean

FX =the sum off set score

n =the number of the students.

## b. Measuring the students who mastery learning

The every cycle, after giving a treatment the researcher gave task to students. The score of the correct answer is 1 and 0 to each incorrect answer. The result of the test would be analyzed by using percentage scoring as following formula.

$$P = \frac{\sum f}{n} \times 100 \%$$

<sup>&</sup>lt;sup>47</sup>Suharsimi Arikunto., *Dasar-Dasar Evaluasi Penelitian*, (Jakarta: PT. Bumi Aksara, 2002) Edisi Revisi, Cet. 6, P. 264

P = Percentages

 $\sum_{f} f$  = number of students who mastery learning

n =the total number of students

From the result of the formula the researcher analyzed the score of task and the result from observation checklist to find out the improvement of students' students' achievement through Whole Brain Teaching (WBT) method on the topic of preferences.

### G. Indicator of Achievement

The students' success and failure in doing the planned activities were assessed by referring to enhancestudents' speaking skill through Whole Brain Teaching (WBT). The proficiency could be successfully gained when the students had the improvement in every cycle. The improvement could be seen on the result of the observation checklist of cycle I and Cycle II, the mean of the students' total score. Here, students must gain at least 75 as the targeted score.