### **CHAPTER III**

#### RESEARCH METHODOLOGY

This chapter focuses on description of research methodology. It consists of research design, subject of the research, setting of the research, the data of the research, research instruments, the technique of data collection, and the technique of the data analysis.

# 3.1 Research Design

The research design of this research is descriptive qualitative. The researcher used descriptive qualitative because the researcher want to describe and analyze the IQ score, and type of intelligences in student's English achievement as foreign language in SMP Muhammadiyah 15 Surabaya based on their mid test score. According to Cresswell (2012:18) qualitative research is the research which describing about the phenomenon. The researcher used questionnaire, documentation of mid test score, and the result of IQ test as the data of the research.

### 3.2 Subject of the Research

The subject of the research is eight grade students in class A of second semester in academic year 2016-2017 at SMP Muhammadiyah 15 Surabaya. The researcher took the purposive sample based on their English mid-test score. The researcher only took one class which divided two groups which consist of 5 students' highest score and 5 students' lowest score. The researcher to explain and classify high score is the score more than 75 meanwhile low score is the score less than 75. It can be seen from the students' score could see in appendix I.

### 3.3 Setting of the Research

The setting of this research is English class in 8A grade students at SMP Muhammadiyah 15 Surabaya. This research conducted on March 6<sup>th</sup> until Mei 30<sup>th</sup> 2017.

#### 3.4. The Data of the Research

The data of this research is about the dominant type of intelligence of eight grade students in English class, the level of IQ profile, and the profile of multiple intelligence for five high achiever's and five low achiever's in English class

#### 3.5 Research Instruments

The research instruments of this research are the Multiple Intelligences questionnaire, IQ result and documentation of English mid-test score in second semesters. Multiple Intelligences questionnaire is to identify the multiple intelligences profile in English class. IQ result is to know the level of the IQ score of eight grade student. Documentation of English mid-test score is to classify the five high achievers and five low achievers based on their score.

## 3.6 The Technique of Data Collections

There are steps of the technique of data collection:

- a. Gathering the mid test score data in English class before the researcher to recognize the IQ level.
- b. Collecting the IQ result which held by Cahya Panca Grahita in year 2015 before the researcher gives Multiple Intelligences questionnaire.
- c. Giving Multiple Intelligence questionnaire which consists of 56 items to 33 participants in VIIIA to find out the student's Multiple Intelligences Profile which adapted from some references, they are from Amstrong, (2009:35-38), makalah kecerdasan majemuk by Dr. Siti Sriyati, M.Pd, The Rogers Indicator of Multiple Intelligences (RIMI) Test, and Mary Ann Christison published in the MEXTESOL) by using Likert scales. According to Dornyei, (2003: 37) Likert scales contains of some statement which related to special target then the respondents should to mark the response option from 'agree' to 'disagree' and each response option has score. For example, 'agree' has score 4 and 'disagree' has score 1. This research use five responses option that consists of 'constantly'=5, 'often'=4, 'often enough'=3,

'sometimes'=2, and 'seldom'=1. To avoid the misunderstanding the meaning of the questionnaire, the researcher translate it into Indonesian language. There are blueprint of the questionnaire.

**Table 3.1 Blueprint of Multiple Intelligences Questionnaire** 

No	The Content of The Questionnaires	Questionnaire Number
1	Linguistics Intelligence	1,2,3,4,5,6,7
2	Naturalist Intelligence	8, 16,24,32,40,48,56
3	Musical Intelligence	9,10,18,26,34,42,50
4	Logical-Mathematical Intelligence	11,17,19,27,35,43,51
5	Visual-Spatial Intelligence	12,20,25,28,36,44,52
6	Bodily-Kinesthetic Intelligence	13,21,29,33,37,45,53
7	Intrapersonal Intelligence	14,22,30,38,41,46,54
8	Interpersonal Intelligence	15,23,31,39,47,49,55

# 3.7 The Technique of Data Analysis

There are some steps which the researcher used to analyze the data:

- 1. Classifying Multiple Intelligences based Multiple Intelligences questionnaire by using Amstrong's theory.
- 2. Finding out the dominant type of intelligence by using Z-score in Microsoft Excel.
- 3. Analyzing five highest student's score and intelligence
- 4. Analyzing five lowest student's score and intelligence.
- 5. Making conclusion and suggestion.