# **CHAPTER I**

# **INTRODUCTION**

# 1.1 Background of Study

Language testing is an important part of language teaching and learning because the results of language tests have effects and impacts on the lives of students, on teaching process, on the school programs and ultimately on the societies (Douglas, 2010). Thus, as the teachers they have to understand the nature of language testing in order to actively promote the responsible use of tests and the appropriate interpretation of test performance. Test is also one of the requirements or compulsory for continuing study, obtaining a job, getting a scholarship, and others. Therefore, a test should be made so it functions according to its purpose or context.

Brown and Abeywickrama (2010) define test as "a method of measuring a person's ability, knowledge, or performance in a given domain" (p.3). It means that the fundamental of testing is indicated by its capability to determine students' knowledge during or at the end of learning activity. In addition, a test can be used to interpret the test-takers ability or knowledge about the lesson and how they perform for specific purpose.

According to Heaton (1990), the most important of the test in language learning is to find out how well the students have mastered the language areas and skills which have been taught. The area of language is including vocabulary that is mostly used in certain situations or places, as for skills consist of speaking, writing, reading and listening. Thus, the main reason to conduct test for language learner is to find out how they perform or apply their specific skill and knowledge of language in a test.

The most frequent test that is used in testing is achievement test as it is used to measure learners' ability within a classroom lesson, unit, or even total curriculum. Achievement tests are often summative because they are conducted at the end of a lesson, unit or term of study in order to measure what students have been accomplished both by individual and groups (Brown & Abeywickrama, 2010). Achievement test could also be in form of formative test with the intention of forming students' competencies and skills in certain parts of the lesson. This test is administered by the teachers that provide appropriate feedback for improvement, while summative is not necessarily related to the future progress of the student.

Achievement test is also divided into subjective and objective tests. Both terms are used to refer to the scoring of test. Scoring a subjective test is more difficult than objective test because it requires a subjective judgment. In contrast, objective test is easier because it has only one possible answer. Multiple-choice is an example of objective test. Multiple-choice format are easy to administer and score, it can also be reliable and valid if it is carefully constructed (Brown, 1996). Because of its convenience and efficiency in scoring, Multiple-choice is mostly used in any summative test for various purposes. However, in making a multiple-choice is not an easy task. It needs to fulfill some requirement to be qualified.

A qualified test can measure students' ability in understanding the learning materials. It means that the institution or school has to be knowledgeable in making test items. Considering the importance of measuring and examining students' achievement, it is important for the teachers to design a good test. A good test can present a definite and factual students' achievement. A test can be told as a good test if it fulfills several requirements of a good test. If it does not fulfill the requirements of a good test, the teacher should redesign and rearrange the test. Therefore, teacher needs to measure the test quality.

Item analysis is one way to analyze and measure the test quality. "Item analysis is the systematic evaluation of the effectiveness of individual items on a test" (Brown, 1996, p.50). This analysis is usually done to eliminate or revise the "bad" items from the test. The result of analysis will help to decide whether it is possible to be revised or not. If it's not, the item will not be shown in the next improved version of the test. Meanwhile, the revised and "good" items will be retained and stored in the question bank. Item analysis can take various forms,

namely item facility, item discrimination and distractor efficiency. By conducting this analysis, teachers can measure student's ability more accurately. The test items which are analyzed are the test items that have been tested to the student and this analysis is performed in order to make the test qualified enough to be used as a measurement tools of student's learning outcomes.

There are two similar studies focusing on item analysis from summative item test. The first previous study was written by Muchyid (2007). He conducted the study about quantitative analysis from the English test tried out at SMP TRIWIBAWA Jakarta. His study was intended to analyze whether the test item is good or bad based on Heaton theory of item analysis that focusing in Facility Value and Discrimination Index. He used descriptive quantitative method in analyzing the data that was taken from English test results of SMP TRIWIBAWA Jakarta. The result of his study showed that 26 items or 52% which are categorized into hard and very hard in Facility Value. There are 36 items or 52% which are categorized into low in discrimination index.

The second previous study was conducted by Ciptaningrum (2014). She discussed the item difficulty and item discrimination from English summative test of the first grade at SMPN 3 Tangerang. The study was intended to analyse whether the test items is easy, moderate or difficult and whether the items able to discriminate the upper and lower group of students. She used mixed method by using qualitative and descriptive analysis. 25 students or 27% from total population were taken as the sample of the data. The finding from her study showed that the test items are categorized as moderate in item difficulty and good in item discrimination.

Those two previous studies only analyzed the item difficulties and item discrimination from the test. In this study, distractor efficiency will also be analyzed beside item facility and item discrimination, because of its benefit and purpose to evaluate the test items. In addition, based onthe interview with the English teacher of IX grade student in SMPN 29 Bekasi, it was found that he has notconducted this kind of analysis before and after the test was given to the students. Therefore, this study will use English final test items for IX grade at SMPN 29 Bekasi to be analyzed. The title of this study is made by the reason that quality of a test can be gained by analyzing the test itself.

#### 1.2 Statements of problem

The statements of problem from this study are:

- 1. What are the item facility (IF) and item discrimination (ID) of English final test in grade IX at SMPN 29 Bekasi?
- 2. Which items are revised based on distractor efficiency analysis?

# 1.3 Purpose of Study

The objectives of the study intend to:

- 1. Explain the item facility (IF) and item discrimination (ID) of English final test in grade IX at SMPN 29 Bekasi.
- Find out the items that need to be revised based on distractor efficiency analysis.

### 1.4 Scope and Limitation

To limit the scope of study, this study will only discuss the item facility, Item discrimination and distractor efficiency of English final test from eight classes in grade IX at SMPN 29 Bekasi. This study only used the multiple choice section of The English final test as data source.

### 1.5 Methodology

#### 1.5.1 Method

This study uses descriptive quantitative method. The study will describe English Final test in grade IX at SMPN 29 Bekasi using Brown's (1996) theory of item analysis. It also uses quantitative method during the collection and calculation of the data.

# 1.5.2 Subject

The subjects of this study are the students and the instruments are test items and students' answer sheets of English final test from eight classes in grade IX at SMPN 29 Bekasi.

#### 1.5.3 Data Collection

The data for the study are taken from grade IX students' answer sheet of English final test at SMPN 29 Bekasi. In collecting the data, this study follows these steps:

1) Giving research permission letter from campus to the school.

- 2) Arranging a meeting with the English teacher to discuss about the test and asking for students' documents.
- 3) Collecting students' documents from English teacher that consist of answer sheets, answer keys, students' attendance data and test paper.

### 1.5.4 Data Analysis

The data in this study are analyzed using the formula from Brown's theory. But before conducting the analysis the data are sorted, compiled and calculated. These following steps are the technique that is used to process the data before continuing to the analysis:

- a) Using random sampling by taking 10 students' answer sheets randomly from each class.
- b) The totals of 80 students' answer sheets from eight classes are arranged based on their scores from the highest to the lowest.
- c) Then, they are divided into two groups: upper group and lower group based on their scores with scale of 50:50. Thus, the top 40 students become upper group and the rest 40 students become lower group.
- d) Then, each item is analyzed based on the formula and guidelines of item facility (IF), item discrimination (ID) and distractor efficiency.
- e) Finally, the results of analysis are categorized based on classification in the theory and concluded

# 1.6 Organization of Writing

This study consists of four chapters. The first chapter is introduction, which consists of background of study, statement of problem, purpose of study, scope and limitation, methodology and organizing of writing. The second chapter is theoretical framework which presents some theories that support the analysis. The third chapter is the analysis. Every data is analysed using theories in the second chapter. The last chapter is the conclusion of the analysis.