

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 Background of the study**

Competency in a simple word is a combination of knowledge, skills, and attitudes related to the subject (European Parliament and of the Council, 2006). It is as the foundation for skill standards in building the degree of knowledge, skills, and abilities needed in the workplace as well as potential measurement criteria for assessing competency attainment.

Competency is broader than skills and refers to a combination of a cognitive, an affective, and a psychomotor domain. Affective domain focuses on attitude, motivation, willingness to participate, and evaluates what is being learned and merges them into real life (Kasilingam et al., 2014). Psychomotor domain emphasizes to the students' psychical skills like coordination, dexterity, manipulation, grace, strength, and speed (Moore, 2001).

The next domain is cognitive. It is the most important aspect (Aswad, 2016). It gives more contribution in managing the affective and psychomotor aspect. It does not only drive the activity of the main but also controls the feeling (affective) and the action (psychomotor). Without the cognitive aspect, the students will be difficult in thinking, and understanding the material in course. Additionally, they also cannot catch the moral value of the material or read a text.

Besides, Finn et al. (2014) stated that cognitive skill could predict the academic performance, it means if the schools improve academic performance they might also improve the cognitive skill. We can see the students' academic

performance through the achievement of both formative and summative test. As English teachers, they need to follow the students' cognitive development through the formative test but, in the end; of course they will know the result of their progress through the summative test. Furthermore, the higher education is focused on the cognitive domain, rather than the affective or psychomotor domain (Sperber, 2005). It also happens in our educational system.

Moreover, the cognitive domain cannot be separated from the cognitive taxonomy. The Cognitive Bloom's Taxonomy by Bloom (1956) has been accepted since the 1950s as a valuable tool for classifying skills in education. It consists of knowledge, comprehension, application, analysis, synthesis, and evaluation. Commonly, written examination suits best in evaluating level one to three while level four to six are usually used in an oral examination.

Bloom's Taxonomy is also famous and mostly used in Indonesia than others (Suhartono, 2011). It is created for settings and it provides a useful structure to categorize test questions since professors will characteristically ask questions within a particular level. It also helps the student to determine the level of questions that will appear on the exams, as a result; they will be able to study using appropriate strategies. Bloom's Taxonomy is also used to decide the type of test or examination.

Anderson et al., (2001) have revised the Bloom Taxonomy that is intended for a broader audience. It fits the teachers' needs' today because it is the most authentic tool for curriculum planning, instructional delivery, and assessment. It consists of six levels namely creating, evaluating, analyzing, applying, understanding, and remembering which ranges from Lower-Order Thinking Skills

to Higher-Order Thinking Skills. It consists of two dimensions; there are the knowledge dimension and the cognitive process dimension.

Cognitive aspect can be accessed through evaluation. The evaluation cannot be separated from the process of teaching and learning because the major concern of teaching the English language for teacher has been assessing and evaluating the students' progress during their course program as well as their classroom achievement at the end of it. Evaluation and assessment focus on different aspects of teaching and learning like textbooks and instructional materials, students' achievement, and the whole programs of instruction.

The English teacher can provide a chance for the students to show what they have learned through evaluation and classroom assessment (Jabbarifar, 2009). From the statement, the teacher can know whether the students can master the lessons that have been taught or not.

Likewise, the teacher can evaluate the effectiveness of the method used and the teaching material through evaluation. So, the improvement in the next lesson planning can be upgraded, consequently, the teaching-learning process will run effectively without any overlapping.

Evaluation is the procedure used to determine whether the subject meets preset criteria (Kizlik, 2012). Inherent in the idea of evaluation is a score. The test is one kind of evaluation to assess the students' achievement. It aims to measure the students' ability or knowledge by providing a number task or questions. It may be administered orally, written, or on a computer. It can be in the form of multiple choice, essay, true-false, matching, completion, and short-answer item. Then, the test should have a good quality because it influences the result. If the test is

constructed well, the result will provide the right information to be used by the teacher in making an accurate decision to the students' achievement.

To measure the students' learning progress at school, the teacher commonly administers two kinds of test: formative test and summative test. Nevertheless, there are three kinds of achievement test like a formative test, a midtest, and a summative test of the Indonesian schooling system (Nur, 2010).

The formative test is frequent testing, which the result is used as guidance in making a decision on what actions to take to promote further learning (Chappuis & Chappuis, 2008). While mid test is a test given in the middle of a school term or semester.

Next, the most important test is a summative test. It aims for grading the students. In addition, it is a part of the evaluation; it aims to know whether the learning objectives have been made in a curriculum is met (Basuki & Hariyanto, 2014:32). It is held at the end of a semester or the year-end of the learning process. It is used to measure the effectiveness of the learning program, validate the curriculum content, and monitor school teaching and learning goals (Alseddiqi et al., 2010).

Furthermore, most of the test in our educational system is in the form of paper-based. The written test is a traditional method but it is a universal test method practiced in most of the educational institutions today. The English summative test is also written on a piece of paper to measure the students' ability in English. The summative test usually consists of multiple choices and essay.

Therefore, the questions on English summative test paper must be provided in accordance with the subject content learned by students to fulfill

learning objectives. However, the process of constructing each test item is a very challenging step for teachers. The situation is getting more challenging when teachers try to produce a good quality and fair questions to assess the different level of cognitive (Abduljabbar & Omar, 2015). In determining and formulating instructional objectives, the teacher only emphasizes on one aspect is cognitive in which it uses lower order thinking skills, likes recalling whereas higher order thinking skills are rarely used (Suhartono, 2011). Consequently, the test items consist of lower order questions because test and instructional objectives have a correlation.

Then, each test item should be made based on learning objective, learning standard or main competence, and basic competence on the syllabus or lesson plan (Basuki & Hariyanto, 2014:36). It also ranges from the easiest to complex questions. Next, in constructing the item the teacher or test maker should determine the students' level.

The way to measure the students' cognitive skills have been stated on School-Based Curriculum and the thirteen curriculums. The learning indicators are derived from standard competence or core competence and basic competence according to the curriculum. Nevertheless, the teachers find difficulty in forming the indicators from each of them (Tondowala, 2012).

Then, they also get difficulty in formulating test items from each indicator based on Revised Bloom's Taxonomy because it consists of two dimensions. The knowledge dimension rarely appears in the item test or belongs to lower order questions.

Handayani (2009) stated that the level of difficulty, the level of discrimination, pseudo-guessing, standard competence, basic competence, and an indicator on English item tests on Junior High School summative test at Yogyakarta are almost good. Besides, the English National Final Examination (UAN) for Junior High School 2006/2007 contained competencies for all skills, and there are 5 items of the UAN material of 2006/2007 did not match with the syllabus and the Content Standard.

The revised Bloom's Taxonomy is used to identify the students' specific knowledge level and determine the level of questions, which may appear on examination or test. Nafis (2009) identified the English summative test item at English UAN of SMA in the academic year 2006/2007 based on Revised Cognitive Bloom's Taxonomy. The findings are; the test items did not fulfill the six levels of Cognitive Bloom's Taxonomy and the relevant sample verbs were only 22,86% included remembering level, 40% of understanding level and 34,28% analyzing level. There were no applying, evaluating and creating levels.

In addition, some researchers also conducted similar studies. Those only focus on English test items on university level textbooks, reading comprehension test of college entrance, and senior high school level. However, the researcher wants to conduct a study for junior high school level.

Based on the background and explanations above, the researcher intends to take up the case through this investigation entitled, "Cognitive Aspect on Junior High English Summative Test".

## **1.2 Problem statement**

Based on the background of the study above, the problem of the study is as the following:

1. How are the levels of Cognitive Taxonomy on English summative test at grade eight of MTsN Gresik in the academic year 2015/2016?
2. How does the teacher design the English summative test based on Cognitive Taxonomy at grade eight of MTsN Gresik in the academic year 2015/2016?

## **1.3 Objective of the study**

Based on the research statement, this study aims to:

1. Describe the levels of Cognitive Taxonomy on English summative test at grade eight of MTsN Gresik in the academic year 2015/2016
2. Describe on how the English summative test items are constructed based on Cognitive Taxonomy at grade eight of MTsN Gresik in the academic year 2015/2016

## **1.4 Significance of the study**

The findings of the study are expected to be used for:

### **1. The students**

The students will be able to use the appropriate strategies by determining the level of questions on the examination

### **2. The teacher**

- a. The finding of the study can be a new outlook on assessment and enable the teacher to create an assignment and project that required students to operate more complex levels of thinking.

- b. The teacher will know how to construct English summative test items based on cognitive taxonomy
- c. The teacher will pay more attention to higher levels of thinking regarding Bloom's revised taxonomy in developing and constructing exam tests.

### **1.5 Scope and limitation of the study**

The English summative test at grade eight of MTsN Gresik in the academic year 2015/2016 consists of 50 multiple choices. Moreover, there are three grades of Junior High School and this study only focuses on English summative test at eighth grade. It is because the summative test focuses on the cognitive demand, so the assessments are more effectively aligned with curricula that promote higher-order thinking, including problem solving and reasoning (Chudowsky & Pellegrino, 2003).

In addition, the Revised Bloom Taxonomy consists of two dimensions: the cognitive process dimension (remember, interpret, apply, analyze, evaluate, create) with sub-categories and the knowledge dimension (factual, conceptual, procedural and metacognitive). The researcher does the analysis based on the cognitive process dimension.

### **1.6 Definition of key terms**

In order to clarify the key term that is used in this study, the definition is put forward:

1. Cognitive aspect is the process of acquiring knowledge, understanding, and solving the problem. The Revised Bloom's Taxonomy consists of six levels; they are remembering, understand, applying, analyzing, evaluating and creating.



2. English summative test is the English test that is held at the end of the program for grading the students. It is called UKK in our educational system.