

CHAPTER I

INTRODUCTION

This introductory chapter elaborates the background underpinning the study provided along with a brief theoretical overview. This chapter also proposes two research questions to answer. In the following sections, purposes, significances of the study in educational fields, and scope of the study are also discussed.

1.1 Background

Higher order thinking skills (HOTS) is one of the agendas in the Curriculum 2013 which has been revised in 2017 (Setyarini, Muslim, Rukmini, Yuliasri, & Mujianto, 2018; Widana, 2017). In general, higher order thinking skills is defined as students' ability to demonstrate their understanding and reasoning about information not only remembering and recalling the information (Widana, 2017). Some changes in the curriculum were based on the needs and challenges that are encountered by students in this 21st century life (Guth, 2016; Yen & Halili, 2015). There are many challenges faced by the students in this era exposing them to various differences in terms of cultures, religions, and perspectives in their society. As a consequence, students should be thoroughly prepared to appraise different situations and problems from many perspectives (Guth, 2016). Therefore, it is important to put higher order thinking skills as one of the main educational goals that should be achieved by the students throughout their learning process since neglecting thinking skills means crucial to development of students to be a good citizen (Ajayi, 2015; Guth, 2016).

Integrating higher order thinking skills in the curriculum 2013 brings a major shift toward learning practices. It also changes the concept of assessment in Indonesia through the policy and practice which is interesting to discuss. Designing assessment integrated with higher order thinking principles becomes crucial in order to evaluate students' thinking ability in the learning activities (Darling-Hammond, 2017). This task can be a difficult thing for many English teachers since they are still not familiar with

the new content in this curriculum (Setyarini et al., 2018) and the previous curriculum tended to focus on summative function of the assessments aiming at grading students' performance based on their partial competences (Pratiwi & Fasha, 2015). In addition, a routine assessment merely assesses students' ability in recognizing knowledge but to what extent students can use the knowledge is quite neglected (Pratiwi & Fasha, 2015). Previously, the curriculum regulations did not promote higher order thinking skills in completing tasks and assignments. According to Abosalem (2016), it can be reflected in poor students' achievement, limited opportunity to students' engagement, and unrelated materials with real-life situations encountered by the students in their surroundings. Thus, this kind of assessment may hinder students to obtain a meaningful learning.

Meanwhile, characterizations of traditional assessment and higher order thinking skills-based assessment are easily observed from their learning practices. Yen and Halili (2015) pointed out some ideas describing higher order thinking skills-based learning in EFL classroom as a dynamic teaching practice compared to a routine teaching. Integrating higher order thinking skills in assessment is indicated by uncertainty principle in completing the tasks since the tasks can be fulfilled by giving students opportunity to present their creative answers instead of one single correct answer (Abosalem, 2016; Yen & Halili, 2015). In addition, one of the ultimate goals to integrate higher order thinking skills in classrooms is to accelerate students' ability in thinking process. It is stated by Brookhart (2010) that the essence of higher order thinking skills is activating thinking process which is indicated by students' capability to apply a wise judgment or produce a reasoned critique throughout learning process (Brookhart, 2010).

Furthermore, higher order thinking-based assessment compared to traditional assessment has different orientations. Firstly, higher order thinking skills, in the current curriculum, demands a better method for assessing students' achievement through appreciating students' process in acquiring the knowledge rather than directly making judgment toward students' outcome (Yen & Halili, 2015). Secondly, investigating what students can do with what they know rather than simply discovering what they know

is more worthwhile to reflect and measure students' learning (Boyd, 2008). Lastly, higher order thinking skills assessment must be able to encourage students to think in higher levels. Higher order thinking skills assessments give the students a space to dig deeper knowledge below the surface for each subject they are studying and engage them in critical dialogue in which they associate main theories and their arguments (Darling-Hammond, 2017; King, Goodson, & Rohani, 2012). In conclusion, it can be assumed that in order to implement the ideas of higher order thinking assessments, a great transformation from previous assessments which mostly assess students' abilities to remember information into a kind of assessment that has the ability to carefully reflect on the information is required.

However, determining the changes in the curriculum is indeed a challenging thing for teachers as the change-agent since they have to comprehend, interpret, and realize it in into a real learning practice reflecting their understanding about the instructions in order to support school and students success at the same time (Hamied, Yadnya, & Sosiowati, 2015). However, in Indonesia context, reflections of the implementation of higher order thinking have been done by several studies (Hanifah, 2019; Setyarini et al., 2018). The studies commonly show that most of our teachers are less equipped with a firm understanding about higher order thinking-based learning either in terms of conceptual level or practical one. Thus, to avoid ineffective and inappropriate assessment, teachers' adequate knowledge about characteristics of higher order thinking skills assessments is urgently needed. Nevertheless, understanding and perception about higher order thinking skills among Indonesian teachers are still various and diverse (Hanifah, 2019; Setyarini et al., 2018).

Regarding this, there are some assumptions among Indonesian teachers about implementation of this curriculum content in learning process. First of all, many teachers are still confused about skills of higher order thinking, its learning method, and learning strategies (Retnawati, Djidu, Apino, & Anazifa, 2018). Besides, many teachers also think that higher order thinking skills are hardly implemented in social subject such as English since the teachers assume that higher order thinking skills are more suitable for science class instead of social science (Setyarini et al., 2018).

Furthermore, mostly teachers and stakeholders identify higher order thinking as a method for assessment realized in the form of complicated test (Brookhart, 2010, Widana, 2017). Consequently, a misconception about higher order thinking assessments which are always admitted as difficult tasks to complete cannot benefit the students to achieve the objectives of thinking assessments, yet it puts students into problems (Darling-Hammond, 2017). Considering this condition, teacher should be well trained and guided about the implementation of higher order thinking skills so that they understand what higher order thinking skills is, how to implement it in their classroom, and how to assess it effectively. By doing so, it is expected that the gap between intended goals of the curriculum and reality in the field can be reduced.

Dealing with assessment, there is an excessive effort done by the government to socialize the implementation of higher order thinking skills in different school levels including Elementary School, Junior High School, Senior High School, and Higher Education (Widana, 2017). It is due to several studies showing implementations of teaching and learning in Indonesian classrooms are stuck in lower order thinking skills such as recalling, memorizing, and understanding the content without further exposing students to higher order thinking skills (Setyarini et al., 2018; Retnawati et al., 2018). It is supported by a result of study conducted by Program for International Student Assessment (PISA) in 2012 highlighting a similar conclusion about the poor quality of teachers' test in terms of promoting, students' thinking ability. Generally, students can achieve lower order thinking skills such as remembering facts, concepts, and terms in subject but students find it difficult to answer questions requiring them to think logically and provide reasons for supporting their arguments. It is due to the facts that teacher-made assessments are still dominated by remembering and understanding questions (Hanifah, 2019).

Further investigations have been done by some researchers to identify the implementation of higher order thinking in the assessment. Many teachers struggle to write higher order thinking questions which are appropriate and suitable in their subject context as discussed by some previous studies. For example, one study showed that higher order thinking is not well integrated in the national examination for chemical

subject at which most of the items are stuck in the level of applying skill (Lailly & Wisudawati, 2015). While evaluative skills and creative skills as realization of higher thinking levels do not exist yet in the test. Another study discerned the extent to which test items may promote students' higher order thinking skills in mathematics. The findings reveal that only few percent of the total items in the teacher-made assessment can promote students' higher order thinking skills since the most of the test items merely require students to recall their understanding (Abosalem, 2015). Specifically in English subject, a study conducted by Singh and Shaari (2019) pointed out English teachers' competence in designing higher order thinking skills assessments for reading comprehension. It was found that there was a tendency from English teachers which English is not their first language to avoid thinking complexity in their assessments such as analysis and evaluation and tend to focus on lower order thinking questions. However, these two studies were done by applying quantitative study focusing on the numbers of higher order thinking questions in the teachers' assessments. The studies did not explore teachers' experience and opinions related to the process of constructing the assessments.

Furthermore, a previous study conducted by Setyarini et al. (2018) mostly investigated the implementation of higher order thinking skills in learning process. This grounded study explored English teachers' learning method and strategies in implementing higher order thinking skills especially through storytelling. The findings revealed that higher order thinking skills started to be promoted by the teachers, yet many challenges were still found by the teachers due to their lack of knowledge and experiences about higher order thinking skills. However, specifically further investigation on teachers' ability in constructing higher order thinking skills assessment was not done yet.

Referring to the previous research, a portrait of higher order thinking skills implementation in teachers' assessment through a deep investigation is thoroughly needed. The description will be valuable as an endeavor to establish the implementation of higher order thinking skills in assessments practices. Thus, this current study is aimed at examining assessments constructed by English teachers based on higher order

thinking principles. Furthermore, this study is also motivated by interest to explore teachers' experience in constructing English questions and tasks which are applicable to promote higher order thinking skills.

1.2 Research Questions

Considering background knowledge of this study, this current study is aimed to answer following research questions:

- How do teachers implement higher order thinking principles in their assessments?
- To what extent do teacher-made assessments meet criteria of higher order thinking questions?

1.3 Research Aims

To follow up research questions that have been stated, there are some aims intended to achieve in this study specifically to:

- Explain the principles of higher order thinking skills assessment implemented by teachers in assessment
- Investigate the extent to which teacher-made assessments meet criteria of higher order thinking questions

1.4 Significance of the Study

The study is significant at least to three areas including theory, practice, and professional aspects. Theoretically, the result of this study is highly intended to give contribution to the discussion of implementation of higher order thinking skills in the context of Curriculum 2013 in Indonesia that is still less understood by teachers, practitioners, and educators. Furthermore, it can enrich the literature of higher order thinking skills, especially in terms of assessment. Practically, this study is intended to be used as an additional guideline for the teachers to implement higher order thinking-based assessment in the context of Curriculum 2013. In a broader sense for professional development, it is intended that the results of this study provide the fundamental reasons for educational stakeholders including test developers and curriculum

developers in making policies related to higher order thinking-based learning assessment in the context of Curriculum 2013.

1.5 Scope of the Study

This study focuses on teacher-made assessments by English Junior High School teachers in the form of written assessment. To avoid unambiguous interpretation, the assessments in this study refer to tests constructed by the teachers to assess students' achievement or known as summative assessments given at the end of middle of semester. The tests mostly consist of several questions either in the form of multiple choices, short answers, and essays. The instructions delivered in the test items become main focus of study analysis. Meanwhile, the teachers involved in this study are selected based on some qualifications emphasizing teachers' prior knowledge and understanding about Higher Order Thinking skills as they have the following points: 1) a clear understanding about HOTs, 2) experience in implementing HOTs in their classroom through some strategies, 3) courage to put HOTs as one of learning objectives. Those can be obtained unless the teachers already got information and experience through teacher trainings or programs related to HOTs. Therefore, having experience in joining seminar and trainings about HOTs are main prerequisites to be the participants of this study.

1.6 Thesis Organization

This thesis is organized into five chapters. Chapter one explains the introduction of the study focusing on the basic concept of the study and the reasons behind the study. Furthermore, research aims and significance of the study are also elaborated in this chapter. Chapter two consists of theoretical framework and reference of this study. Regarding aim of this study, some theories explained in this chapter cover principle of higher order thinking skills, Curriculum 2013, and learning assessment. Chapter three presents the methodology of the study which contains research design, method, research setting, research participants, data collections, and data analysis. Meanwhile, chapter four comprises results and discussions of the study. It contains the result of the study and its findings. At the last, chapter five explains the conclusion of

the study including the limitation of the study and recommendations for further studies. This chapter also elaborates the strength and weakness of the study.

1.7 Key Terms

To help readers understand and avoid ambiguity in reading this paper, this part explains several essential terms applied in this study. Each of the terms is elaborated as follow.

The Curriculum 2013

The Curriculum 2013 has been implemented in Indonesia since 2013 and revised in 2017. This curriculum notices some remarkable changes in conceptual and practical aspect of education through several concepts that should be integrated by teachers in learning process such as character education and scientific approach. Until now, the curriculum has been revised in order to be able to accommodate demand of 21st century demand. Regarding this, four concepts are integrated in the curriculum including character education, literacy, critical thinking, and higher order thinking skills.

Higher Order Thinking Skills

Higher order thinking skills refers to three highest levels of cognitive skills proposed in Bloom's Taxonomy namely analyzing skill, evaluating skill, and creating skill. These skills encourage students to think beyond remembering and understanding facts, yet they have to transform the information in such away in order to be acceptable for a specific purpose.

Teacher-Made Assessments

Teacher-made assessments refers to assessments that are constructed by English teachers for their students in order to measure students' progress. This kind of assessments are designed genuinely by the teachers for their classroom through considering demands of curriculum and their students' characteristics.

