# CHAPTER I INTRODUCTION

This chapter depicts the background of the study, research questions addressed, the purpose of the study, the scope and significance of the study.

### 1.1 Background of Study

To face this rapidly changing world, educators are putting their concern over producing *the 21st-century thinkers*. These thinkers are defined based on what they are able to do in the era when technology and the internet enable the proliferation of knowledge and information can be streamed everywhere (W. Conklin, 2012). Saavedra & Darleen Opfer (2012) pointed out that the abilities demanded to teach and learn in this century are often referred to as higher-order thinking skills, meaningful learning outcomes, and communication competency. In this context, education is challenged to prepare students with crucial skills to cope with today and future living and obtain benefits of the changes in improving educational practices. In response to the urgency of HOTS, the Indonesian Ministry of Education and Culture has decided to promote HOTS in the national curriculum at all school levels in all subjects, including English as a foreign language (Kemendikbud, 2019; Prastikawati et al., 2021).

As one of the necessary 21<sup>st</sup>-century skills to equip students, higher-order thinking skill (hereafter cited as HOTS) is a thinking ability that involves higher abilities, such as creative and critical thinking skills (Jaenudin et al., 2020). Meanwhile, in a framework of thinking taxonomy

from Bloom's revised version, the ability to analyze, evaluate and create belong to HOTS (Anderson, 2001). These levels of skills require students to be capable of answering 'how' and 'why' (Schwartz & Fischer, 2006) and being creative in solving problems, and wise in making decisions (Brookhart, 2010).

In recent years, researchers and educators have extensively studied and observed the implementation of HOTS in education (see Charanjit & Marappan, 2020; Conklin, 2012). Within the language learning context, some research on HOTS in EFL education reviews that higher-order thinking plays an important role in language learning as its benefits enable EFL learners to speak confidently, explore more, and solve unfamiliar tasks (Setyarini et al., 2018; Setyarini & Ling, 2019). Brookhart (2010) added in her book, that students who receive teaching through HOTS can solve problems by connecting their knowledge and experience and are able toelaborate their statements or opinions (p.10). Thus, to enhance these skills, integrating into the teaching-learning process is viewed as necessary (Tyas & Nurkamto, 2019). However, although those enumerated skills are classified as HOTS and the development of HOTS has become the focus in modern education, Lower-Order Thinking Skills (hereafter cited as LOTS) cannot be ignored and removed like they are something unimportant and intruding abstract knowledge (Tikhonova & Kudinova, 2015). Lemov (2010) stated that the more an individual is capable at LOTS, the more capable he can become at HOTS. Supported by Anderson

and Krathwohl (2005), learning needs to be structured and begin with easy to difficult tasks. In this case, there should be a balanced collaboration of well-developed lower and higher thinking abilities where LOTS are included and not as an obstruction of the HOTS enhancement. Thus, balanced thinking skill allows the transformation from "simple to more complex operations, from observable to abstract dimensions, and from an emphasis on working with known materials toward an emphasis on creating or inventing new, previously unknown approaches or materials" (Presseisen, 2001).

The integration of thinking skills in the teaching-learning process is closely linked to some aspects such as learning material availability, national curriculum policy, teachers' readiness, and students' cognitive abilities (Thamrin & Agustin, 2019). Goldenberg (2013), cited from Bernard, et al (2020), argued that teaching practices should include adequate and challenging material, clear objectives, and well-organized instruction and instructional routines. To enhance the thinking skills, teachers should set "clear learning goals and objectives that promote the development of student's critical thinking skills", providing adequate material which is not too complex or too easy for students to comprehend. Supported by Tyas, et al. (2019), the material should employ activities with open-ended questions to prompt students to think critically. An experiment conducted by Nourdad et al (2018) suggested that language teachers should increase the level of the questions in their classes to invite

learners to think at higher levels as their findings reveal that HOTS has positively impacted students' reading comprehension (Nourdad et al., 2018). Besides questions, instructions on each learning activity play an important part in leading the stimulation of thinking skills in the teaching-learning process according to Goldenberg (2013), cited from Bernard, et al (2020). Meanwhile, there have been several valuable syntheses of previous studies in terms of instruction in a learning activity (Bernard et al., 2020; Janah, 2020; Sari, 2019; Trisnayanti & Masykuri, 2021). However, it appears that examining thinking skills integrated into instruction, specifically in DLM is remaining scarce (Aulia & Permana, 2021).

Furthermore, there has been little research focusing on the representation of thinking skills in EFL learning materials, particularly in digital learning material (hereafter cited as DLM) despite of the fact that the conservative class has been shifted into online classes due to the pandemic (Roza, L.; Aulia, 2021). For example, a content analysis conducted by Aulia and Permana (2021), found that English exercise for high school students made by RuangGuru application represents adequate HOTS. Besides that, an observation was also done to test students' HOTS by utilizing Quizziz which reveals that this DLM is efficient (Purwaningsih et al., 2021). Concerning the utilization of DLM during the pandemic, *My English Step* website is developed to facilitate teachers and students in teaching and learning EFL with adequate digital materials that

have been integrated with the National Curriculum (Mayuni et al., 2021, p. 451-465).

However, in Indonesia, the integration of HOTS in EFL learning materials remains insufficient according to a number of studies that analyzed HOTS representation in textbooks and classrooms. For example, Sari (2019), focusing on essay reading exercises, found that *Erlangga*'s Pathway English book has only a few HOTS questions. Similar studies investigated textbooks composed by the government revealed that the cognitive process at the HOTS level is less dominant than LOTS (see Fakhira & Iskandar, 2020; Febriyani et al., 2020). Added to Bernard, et al. (2020), the condition normally happens at most schools due to the fact that LOTS exercises are easily made by teachers and solved by students within a limited time. Considering students' ability, a survey carried out by Tyas, et. Al. (2019) concluded that students' limited ability in English is one of the obstacles encountered because English is not their mother tongue or second language. As a result, the materials and exercises provided refer to that low proficiency. The largest category of transfer-based objectives goes to understanding (Anasy, 2016). Therefore, LOTS help students to build their vocabulary and get engaged in learning activities (Johansson, 2020). It means that LOTS scaffold students.

The representation of thinking skills in the EFL learning exercises, especially at the Junior High School level, lacks study at this level (Feronica et al., 2021). Moreover, there have been studies conducted in

analyzing thinking skills in EFL learning activities and exercise but most of them only focus on HOTS and certain language skills, such as reading comprehension (see Qaswari, 2020; Fakhira & Iskandar, 2020; Sari, 2019). Furthermore, in many of the prior studies, the low distribution of HOTS in learning materials is often seen as a *flaw* in the learning materials (Presseisen, 2001). In addition, just a few researchers review both HOTS & LOTS on e-learning materials (Ahmad, 2018; Janah, 2020; Qasrawi & Beniabdelrahman, 2020). Ahmad (2018) observed a class in a senior high school and concluded that the implementation of thinking skills should be in sequence as the students often get confused when they have been in the activity that requires HOTS, for instance, Create. As a result, the students need to be taught again. On the other side, Janah (2020) with content analysis revealed that the English textbook for the eighth grade is dominated by LOTS than HOTS. In addition, since My English Step was launched in 2021, there has not been any review about this EFL e-learning platform although the website provides digital-literacy-based materials and activities (Mayuni et al., 2021). Therefore, the limitation of the prior studies encourages the researcher to further explore HOTS & LOTS representation in digital learning materials for Junior High School.

## 1.2 Research Questions

In reference to the background of the study, this study focuses on:

- (1) What is the predominant level of thinking skills represented in the exercises of My English Step learning materials for eighth graders?
- (2) How is the representation of thinking skills based on Bloom's Revised Taxonomy in the exercises of My English Step learning materials for eighth graders?

#### 1.3 Purpose of The Study

The purposes of this study are to:

- 1. Describe the ways thinking skills are represented in the exercises of the *My EnglishStep* learning materials for the eighth graders.
- 2. Determine which level of thinking skills is considered the predominant level in the exercises of the *My EnglishStep* learning materials for the eighth graders.

## 1.4 Scope of The Study

The researcher limits the study by analyzing thinking skills that are represented in the exercises from all units of *My English Step* for eighth graders, in terms of questions and instructions. The data will be analyzed by using an analysis table of cognitive levels according to Bloom's Revised Taxonomy.

#### 1.5 Significance of The Study

Regarding the significance of the present study, it is expected to be useful feedback for not only *My English Step* but also in the other digital learning materials and e-learning application developers to distribute higher-order thinking skills. Theoretically, the results can be a reference for future research in supporting the study of the representation of HOTS & LOTS. The indicators can also be beneficial for education stakeholders, including teachers as a theoretical and methodological tool in considering appropriate EFL learning materials, teaching English, and promoting thinking skills from BRT as well. Practically, they can encourage teachers and English Language Education Study Program students by raising awareness of the HOTS & LOTS implementation in learning materials.