

CHAPTER I

INTRODUCTION

This chapter contains the explanation related to the background of the study, problem identification, limitation of the study, statement of the problems, purposes of the research, and significance of the study.

1.1 Background of the study

Learning has entered the industrial revolution 4.0. It is marked by the presence of technology that makes it many people easier to learn. Some evidence of technologies is artificial intelligence, networking, and virtual technology that develops over time (Lase, 2019). The influence of Industrial Revolution 4.0 is that the student should be balancing themselves with the development of technology to attend the coming era. To balance, it can use 21st-century learning, which is in line with the existence of the 4.0 industrial revolution, and it is in line with the needs linked to a digital lifestyle (Yahya, 2018).

Learning in the 21st century requires students to master the character of 4C (Zubaidah, 2018). The characters of 4C are divided into communication, collaboration, critical thinking, and creativity (Rahman, 2018). Communication is defined as an interaction between students. It obtains accurate information from both parties (Ariyana, Yoki, Pudjiastuti, Ari, Bestary, Reisky dan Zamromi, 2018). Collaboration is defined as working in a team or working with others (Zubaidah, 2018). Critical thinking is defined as a more critical way to think about things that are still logical or natural (Wahid & Karimah, 2018). Meanwhile, creativity is defined as the ability to think creatively about overcome problems or to be able to produce something new (Sugiyarti et al., 2018).

4C characters have the purpose of making students capable of dealing with problems that exist in the 21st-century problem or based on real issues (Sugiyarti et al., 2018). According to Prihadi (2018), the other purpose of applying the 4C character is to make students more creative and innovative in the gap between expectations and reality. Based on these two objectives, schools in Indonesia should have to begin to apply the 4C character, starting from elementary school, in order

to compete with the progress of education that continues to grow (Sugiarni & Kurniawati, 2019).

In education in Indonesia, most students have not been able to apply the characters of 4C, which makes them unable to think critically (Rachmedita et al., 2020). Thinking critically for the student means that the students can understand the concepts given and apply the previously received information (Zubaidah, 2017). Since many elementary schools have not used the 4C characteristics, it is difficult for them to produce students who can think at high levels (Kurniati et al., 2016). There are two types of thinking skills on taxonomy bloom: high order thinking skill and low order thinking skill (Sutrisno et al., 2018).

High-order thinking skills, or HOTS, is one of the conditions used to balance education in the 21st century (Ariyana, Yoki, Pudjiastuti, Ari, Bestary, Reisky dan Zamromi, 2018). According to Santosa (2020), HOTS is an abbreviation of "High Order Thinking Skill," which is interpreted as the ability to think applied to individuals to thinking higher or more critically. Higher-order thinking skills already exist in the 2013 curriculum (Mariappan, 2019). Besides HOTS, there is also a lower level of thinking or better known as LOTS (Triyanto et al., 2017). The difference between HOTS and LOTS is the way the concept needs to be understood. HOTS requires more critical thinking than LOTS (Goodson & Rohani, 2015)

In Indonesia, most of the teachers lack in differences between HOTS and LOTS in their application. One of them is elementary school; most teachers used LOST to think it suited students' abilities (Rapih & Sutaryadi, 2018). In the steps of HOTS, the student should pass the processes of analyzing, evaluating, creating. In LOTS, students only pass the process of remembering, understanding, and applying, usually found in Indonesia (Anderson & Krathwol, 2001). Most teachers in Indonesia only apply to the extent of LOTS in terms of the type of questions, reading texts, and others. It makes the outcomes received do not match the desired results in this era (Rapih & Sutaryadi, 2018).

The purpose of 4C cannot be complete with the LOTS learning system, and it only can be answered with HOTS learning. It is already discussed in a relationship between the 4C characters with HOTS published by "The partnership 21" (Peppler,

2017). Rapih & Sutaryadi (2018) added that the relationship with the 4C characters with HOTS is getting stronger in this era. In "The partnership 21," there is a point discussing academic 3R, namely read, record, recite, and 4C, namely creativity, critical thinking, communication, and collaboration. (Peppler, 2017).

The lesson plans made by the teacher should be following the curriculum being circulated. (Direktorat Jenderal Pendidikan Dasar dan Menengah Kementrian Pendidikan dan Kebudayaan, 2017). Some of the cases found that the lesson plans made are not suitable for the purpose. These problems are found in elementary schools in Indonesia and found in some junior high schools and senior high schools. The lack of understanding of teachers who cannot apply 4C to plan lessons is one of the problems that is often identified. With the problems, the results given to students to implement 4C are far from the needed (Rapih & Sutaryadi, 2018). The results shown are not in line with the goal of HOTS, which is to make students not able to think more critically (Prihadi, 2018)

In the preliminary observation, the teacher said that the teacher only focused on LOTS activity in paper-based tests, reading, and others. According to the teacher, it was essential to apply HOTS to children still developing, especially in elementary school, but difficult to implement. The other obstacles were in implemented HOTS because of the lack of support in the worksheet or book. The book only focuses on knowledge (C1), understanding (C2), and application (C3). At the same time, HOTS should concentrate on learning activities which include analysis (C4), evaluation (C5), and creation (C6). Education in the 21st century must now be HOTS-based, where students competed in real life and advance learning 4.0. The existence of HOTS in activities carried out with attractive designs motivated students to learn more critically English skills in everyday life and with support from schools in developing learning activities in teaching English.

1.2 Research Identification

In 21st century learning, students must be required to have the character of 4C and more knowledge to compete in real life in the future. Students should be able to compete with technological advances by learning to analyze problems in

their environment. This 21st-century learning must make learning more complex, modern, and dynamic than traditional learning.

Based on preliminary interviews, it can be found obstacles regarding the application of HOTS. Teachers themselves are still confused about the application of HOTS, which still relies on the application of LOTS, such as reading and giving assignments without activities that make students think critically. Teacher learning is currently still in the form of a paper-based test to include HOTS in their education. It was making it visible that there is a lack of performance in improving HOTS goals in the current era. It is also due to the lack of information that supports teacher performance in teaching and applying HOTS in learning activities

1.3 Limitation of the study

The research limitation in this study uses 6th-grade elementary school students with a focus on developing HOTS for learning English. All activities were carried out to assess the quality and effectiveness of HOTS development, in particular for sixth-grade elementary school students of the 2020/2021 school year.

1.4 Statement of Research Questions

Based on the explanation above, the formulation of the problems is as follows:

1. How to develop students' worksheets based on HOTS for the sixth-grade student in elementary school?
2. How is the students' worksheet quality based on HOTS for sixth-grade elementary school?

1.5 Objectives of the study

The objectives of this research are as follow:

1.5.1 General Objectives

This research aims to develop HOTS-based learning activities for elementary school students to achieve the 4C character for sixth-grade students. It is necessary for the 21st century of learning.

1.5.2 Specific Objectives

- a. This research develops the students' worksheet based on HOTS for sixth-grade elementary school students.

1.6 The specification of the study

The specification of the product of this research is formulated as follows:

This worksheet is based on HOTS for the sixth-grade student in the second semester designed to be implemented by teachers by containing engaging and authentic activities for students. Thus, students can connect learning with their real-life activities.

1.7 Significances of the study

Regarding the background, research problems, and research objectives, this research had significance theoretically and practically in the implementation of learning activity based on HOTS as follows:

1.7.1 Theoretical Significance

This research is expected to contribute to developing knowledge, particularly the development of worksheets based on HOTS for elementary school students.

1.7.2 Practical Significance

- a) For the teacher

Teachers have the opportunity to learn how to carry out HOTS-based learning activities for sixth-grade elementary school students. Teachers can also provide designs based on the creativity of teachers when applying HOTS.

- b) For the student

Students have good skills in critical thinking, knowledge, and attitudes through HOTS-based learning. In addition, students are expected to have high thinking skills to solve their problems in real life.

- c) For the future researcher

This research is an excellent opportunity for knowledge and information about HOTS-based worksheets in elementary schools. By continuing or conducting research on this worksheet-based, HOTS can be used as a guide for its implementation

1.8 Assumption and the Limitation of the Development

The syllabus and current situation are used to identify and define the topics contained in the students' worksheet based on HOTS for sixth-grade elementary school students in the second semester. The assumption and the limitation of the development of English learning activities based on HOTS are formulated as follows:

- a. The product is developed based on the syllabus of the sixth-grade elementary school students.
- b. The product is developed for the second semester of the sixth-grade elementary school student only. Further research is needed to make the product better.

1.9 Definition of Key Terms

1.9.1 HOTS

HOTS, or high-level thinking skills, are essential for students in the twenty-first century. HOTS can be characterized as a student's ability to think about higher-order or more critical thinking (Fanani, 2018). The goal of HOTS is to increase students' skills and the quality of their learning. HOTS-based learning has had a positive impact on the growth of Indonesian education for it to participate in Industry 4.0. HOTS is currently being used in a variety of learning activities. HOTS-based activities significantly impact students' ability to think critically (Purnama & Nurdianingsih, 2019).

1.9.2 Young Learner

Young Learner was a child who began studying at the age of five and continued until he started primary school for the first time. Young learners can also be defined as still in primary school and require exciting learning supervision. Young Learners have very active learners that are extremely curious and adaptable to new experiences (Fajarina, 2017). However, because they have unstable emotions and monotonous activities, young learners perceive being quickly bored by learning. Because young learners and adults have different personalities, knowledge must be tailored to the child's age criteria (Kalantari & Hashemian, 2015).

1.9.3 Learning Activity

Learning activity refers to learning that students did as they grow. The learning activity can also be defined as an activity carried out to meet the teacher's objectives. All activities must include interactions between teachers and students to accomplish this level of learning. The curriculum's established guidelines must carry out the learning process. Moreover, the activities must be capable of teaching students the abilities required to think critically. To make learning more efficient, create challenges that need students to think and motivate themselves (Codier, 2016).

