

CHAPTER I INTRODUCTION

This chapter presents the background of the study, problem identification, research limitation, research question, research objectives, the specification of the product, research significance, limitation of the study, and definition of key terms.

1.1 Background of the Study

Learning systems around the 21st Century experienced a change caused by the demands of the era from year to year, and the center of the learning system, changed which was initially centered on the teacher moved more student-centered (Ichsan et al., 2019). According to Alsowat (2016), if teacher-centered learning is intense, teachers exert too much influence over their students, resulting in students preferring to learn information rather than abstract concepts. Current learning systems have changed to become more student-centered because they are considered more effective than conventional learning systems. In today's era, the progress of a country is greatly influenced by human resources, and students are expected to develop thinking skills to compete with many situations that occur in the real world (Wilson & Narasuman, 2020).

Education 4.0 answers the industry revolution (IR4.0) requires where humans and technology converge to allow for new possibilities (Hussin, 2018). According to Fisk as cited in Hussin (2018) the new learning vision enables learners not only to learn the necessary skills and knowledge but also to recognize the source through learning certain skills and knowledge. Industry 4.0 is a new generation from a revolution in the past that affects the technical sectors, including education. The higher learning institution is seen as the forum for improving the necessary

skills for Industry 4.0 adoption. Learning institutions need to compete with creative, transparent, and dynamic learning environments to provide an Industry 4.0 mindset or skills. Nowadays, HOTS's role in learning systems is a foundation for facing global challenges (Tyas et al., 2020).

Higher Order Thinking Skills (HOTS) is where students can think at a higher level than usual (Ichsan et al., 2019). According to Lewis, 1993 as cited in Tyas et al. (2020), HOTS combines new information with old information to discover something new. While Kemendikbud (2017) explains that HOTS questions are measurement instruments used to measure higher-order thinking skills, namely the ability to think that is not merely a recall, restate, or refer without processing (recite) (M. Z. Fanani, 2018). By implementing HOTS, students are expected to think than usual to find something different. The use of HOTS in teaching-learning believe incapable of raising the students' cognitive levels. It is in line with Alsowat (2016) statement that higher-order thinking skills improve students' engagement and achievement.

Talking about cognitive levels, from the Taxonomy Bloom's revised results, it can be divided into two levels: Lower Order Thinking Skills (LOTS) and Higher Order Thinking Skills (HOTS). LOTS consists of remembering (C1), understand (C2), and apply (C3), while HOTS consists of analyze (C4), evaluate (C5), and create (C6). Hence schools and other educational governments in the 21st Century can build capabilities in this era. It was introduced in Indonesia by the 2013 Curriculum with the word "4 K," as cited in Nofrion & Wijayanto, (2018), which is in Bahasa Indonesia

1. Kecakapan berfikir kritis dan pemecahan masalah (Critical Thinking)

2. Kecakapan berkomunikasi (Communication Skills)
3. Kreativitas dan Inovasi (Creativity and Innovation)
4. Kolaborasi (Collaboration)

In Indonesia, the introduction of the 2013 curriculum is intended to provide a stable base for achieving HOTS in students (Rapih & Sutaryadi, 2018).

Promoting critical thinking start from elementary school is one of developing a better generation. It is in line with Rapih & Sutaryadi (2018), which the 2013 curriculum as a way to attain HOTS at elementary school (SD) is a definite attempt to boost the students' level of learning as soon as possible. One aspect of the transformation of the 2013 curriculum in primary school is to improve integrated learning processes using a scientific approach with the implementation of higher-order thinking skills. In critical activities, all the practices for students are involved in the learning phase, from physical to psychological practice (Nofrion & Wijayanto, 2018). Depending on the findings of International Research, *Programme for International Student Assessment (PISA)* indicates that Indonesian students reach low reading literacy rates, mathematical literacy, and science literacy. Many factors are causing the low results of the PISA report. It is caused by the less skilled of Indonesian students in solving contextual problems, requiring logic, argumentation and imagination in solving them where these are aspects of *Trends in International Mathematics and Science Study TIMSS* questions. This is in line with the Ministry of Education and Culture (2013) which notes that Indonesian students have low achievement due to the large number of TIMSS content not found in Indonesian education systems (M. Z. Fanani, 2018).

SDN 1 Banyuasri was chosen by the researcher as research setting due the teacher's book did not implemented the high order thinking skills activities and SDN 1 Banyuasri need the possible book to help the teacher in developing students' critical thining skills in the learning process. The researcher was chosen fifth grade elementary students as the participant in this research due the fifth grade can be categorized as upper grade students in the context of elementary school. Where at this level students need the help of teachers to complete their tasks and fulfill their desiresand also students in this level had the prior knowledge about English skills which can improve their skills. Therefore, the researcher developed a student's worksheet that helped students in developing their own critical thinking in line with the 21st-century learning model that is more student-centered. Early education is significant for students' skill development. In order to construct learning activities in teaching English, the teacher needs assistance from the school and the educational authority to prepare the sources of the teaching media yang berbasis HOTS.

In the preliminary research, the research that was conducted in SDN 1 Banyuasri showed several information about the school. In the preliminary observation, the researcher collect the information by using instrument of observation sheet to find the information that the researcher needed. After that, the researcher conducted the interview guide to the teacher who teach English in fifth-grade level. The researcher was conducted the interview guide in order to re-confirm the information that the researcher found in the observation phase. Based on the observation interview process, there were found some information that the researcher needed to support the topic that the researcher will create, such as in

SDN 1 Banyuasri, the teacher already used a handbook as a source in learning teaching activity but the teacher's handbook did not show the HOTS concept, most of the books focused on knowledge (C1), understanding (C2), and application (C3) which can be categorized as LOTS. HOTS on the other hand, must be centered on the learning process of analysing (C4), evaluating (C5), and creating (C6) and the syllabus used by the teacher based on KTSP curriculum. And also, in the interview guide section, the teacher said that the used of HOTS for the primary school context is good because it helps to measure students' abilities and needs. Students can be asked stimulus questions in learning activities to provoke student creativity in improving the critical thinking. In providing HOTS-based material, it is also essential to look at the students' cognitive abilities. The reaction of students in HOTS-based material is certainly not too evenly distributed. It is because every student does not have the same ability. In the application of HOTS, it is still too inclined in psychological activities only. Even though the development of HOTS must be balanced, Nofrion & Wijayanto (2018) state that the activities performed by students in the learning phase are from physical to psychological practice.

Based on the description above, this study was conducted to develop students' worksheets based on 'HOTS' on English language learning activities for 5th-grade elementary school students especially in the first semester.

1.2 Research Identification

An educator must use several learning media to increase the efficiency of the teaching and learning process at educational levels. Teachers often face a certain

level of difficulty in facilitating students to achieve particular competencies. This problem is due to the characteristics of each child who is part of the study group.

Based on the problems in the research background, it can be seen that the teachers still have difficulty in developing HOTS-based English learning activities for elementary school students because most of the teacher's book does not feature the HOTS learning activities. The elementary school teachers need workshops to develop HOTS-based student learning since not all teachers understand HOTS.

1.3 Limitation of the Study

It primarily focused on developing HOTS for teaching English activity in elementary school students. Besides, this research also focused on the needs of 5th-grade students in the HOTS context by taking the fifth grade elementary school students as the subjects.

1.4 Statement of Research Questions

In this research, the researcher proposed the following statements of the questions:

1. How to develop the students' worksheet based on HOTS for the fifth-grade elementary school in the first semester?
2. What is the students' worksheet quality based on HOTS for the fifth-grade elementary school in the first semester?

1.5 Objectives of the Study

The research objectives for this research are as follow:

1.5.1 General Objectives

In general, the research was conducted to develop a worksheet based on HOTS to support students in possessing the skills they need in the twenty-first-century context.

1.5.2 Specific Objectives

1. To design and develop students' worksheet for fifth-grade elementary school students in the first semester that can be used to train students to think critically with the learning activities based on HOTS.
2. To evaluate the students' worksheet quality based on HOTS for the students in the first semester of the fifth-grade of elementary school.

1.6 The specification of the Study

The end product of this research is specified as follows.

1. The English learning activities based on HOTS for the first semester of 5th grade were designed to be used by the teacher in elementary school.
2. HOTS-based English learning activities for the first semester 5th grade semester included interesting and realistic learning activities. The students should indeed link the learning to their actual life activities

1.7 Research Significances

The results of this research are expected to give positive contributions both practically and theoretically. The significance expected for this research is as follows.

1.7.1 Theoretical Significance

Theoretically, it is expected to contribute to the quality development of the learning activity HOTS-based in 5th-grade elementary school students.

1.7.2 Practical Significance

a. For the students

Students' critical thinking is expected to be built and well-developed through the use of the HOTS-based worksheet.

b. For the teachers

This study is expected to help the teacher develop 'HOTS' based on English language learning activities for 5th-grade elementary school students. The present study can be used as a reference by the teacher to develop the learning activities.

b. For researchers

This study is expected to be used as a guidance and reference for other researchers in conducting similar studies.

1.8 Assumption of the Limitation of the Development

The syllabus and current situation are used to determine the topics contained in the students' worksheet based on HOTS for the first semester of elementary school students in 5th grade. 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 5th grade elementary school syllabus.
- b. The product is developed for the 5th grade elementary school students in the first semester.

1.9 Definition of Key Terms

1.9.1 High Order Thinking Skills

Higher Order Thinking Skills (HOTS) is where students are willing to reflect at a higher level than usual, and students are supposed to think higher are able to analyze, evaluate, and create a problem-solving solution (Ichsan et al., 2019).

1.9.2 Learning Activity

Hamalik stated as cited in (Nofrion & Wijayanto, 2018), Learning activities are all practices students who involve in the learning phase, from psychological to physical practice.

1.9.3 Young Learner

According to Bakhsh (2016), young learners are children aged from five to six years of age until twelve years of primary school.

1.9.4 Worksheet

According to Ikhsan & Handayani, (2016), students' worksheets are designed to help the students create their ideas when participating in learning activities and answering questions.