#### **CHAPTER I**

#### INTRODUCTION

This chapter contains the explanation related with the background of the study, problem identification, limitation of the study, statement of the research questions, purposes of the study, specification of the study, significances of the study, assumption of the limitation of the development, and definition of key terms.

### 1.1 Background of the study

In the 21st century competencies, educational institutions are required to develop students' 4C skills that have been adopted by the 2013 Curriculum (Nofrion & Wijayanto, 2018). They are critical thinking, communication skills, creativity and innovation, and collaboration. According to Dillenbourg (1999) as cited in Sidera Caballero et al. (2013), collaboration is the form of learning in education nowadays. Collaboration is a learning method that requires collaboration skills (Cabero, 2003). Moreover, Sidera Caballero et al. (2013) stated that to face the real-world society, the students are expected to improve their cognitive, affective, and skill competencies in the learning process.

The learning environment has rapidly changed over the past few years. It is due to the 21<sup>st</sup> century demands that affects some learning aspects and change the learning competencies. The teaching and learning approach has altered from teacher centered into students centered (Quieng, Lim, & Lucas, 2015; Sharif & Cho, 2015 in Ichsan et al., 2019). The activities in the learning process is conducted according to 2013 curriculum. It requires the teacher to design more advanced learning activities. Therefore, students face difficulties to solve problems that require

reasoning and analysis skills. Due to this reason, the students tend to be passive learners (Irwanto et al., 2018).

There are still many teachers who do not understand HOTS. This is proven in the learning activities, worksheet, and assessment implemented by the teachers. Teachers are required to develop and convert learning activities from Lower Order Thinking Skills (LOTS) to Higher Order Thinking Skills (HOTS) in designing lesson plan. HOTS is a high thinking level skill that require critical, creative, and analytical thinking in processing information and resolving problems (Barratt, 2014 in Achmad Fanami and Dian Kusmaharti, 2019).

In the preliminary observation in SDN 1 Banyuasri, the teacher stated that HOTS is important, but there is a lack of support in the implementation. The teacher unconsciously inserted the HOTS in the learning activity and the worksheets. The book that is used by the teacher does not include HOTS in the learning activities. The book focuses on knowledge (C1), comprehension (C2), and application (C3). However, HOTS demands the learning activity that includes analysis (C4), evaluate (C5), and create (C6).

SDN 1 Banyuasri was chosen by the research due to the book had not implemented the high order thinking skills activities and SDN 1 Banyuasri need the good book to improve the learning process. The researcher chosen fifth grade elementary students as the participant in this research due to the fifth- grade students had had the prior knowledge about English skills and the students can improve their skills in the next level. Early education is essential for the students in gaining the knowledge. HOTS is important to measure students' ability to learn English. The teacher created a higher level of questions for a different level of students. The

teacher needs support from the school and the educational council in developing the learning activities in teaching English.

#### 1.2 Problem Identification

Currently, the students are prepared to have skills, knowledge, and competency to live and work in an ever-changing environment. In the 21<sup>st</sup> century learning, the students are required to solve environmental problems in their surrounding and go beyond than just memorizing concepts. Furthermore, the teachers are also challenged to provide complex and dynamic learning opportunities.

Based on the preliminary interview, it was found that the teacher's knowledge particularly about HOTS concept and learning activities bare still low. The teacher does not fully understand the concept of HOTS, especially in designing the learning activity in teaching English. The learning activity designed by the teacher needs to relate to the 21st-century educational demands. However, the teacher only emphasizes the paper-based test to promote students' HOTS. In the examination, the students are given tests based on students' level of ability. The teacher does not create a performance-based test and project-based test that require HOTS. It indicates the teacher is lack of information regarding the concept and the implementation of HOTS in teaching English.

### 1.3 Limitation of the study

Based on the problem identification, the focus of this study was limited to the development of students' worksheet based on HOTS in English language learning activities for elementary school students. Besides, this research investigates development of the learning activities by using HOTS-based, especially for fifth-grade level students in the academic year 2020/2021. This study also aimed to find out how to develop HOTS-based English learning activities for fifth-grade elementary school students.

### 1.4 Statement of Research Questions

Based on the research background above, the research problem can be formed as follow:

- 1. What kind of worksheet can improve the students' HOTS for fifth grade on second semester in elementary school?
- 2. How to develop the worksheet based on HOTS for fifth grade on second semester in elementary school?

### 1.5 Purposes of the Study

The objectives of this research as follow:

# 1.5.1 General Objectives

In general, the research developed elementary school students' worksheet to help students practice their higher-level thinking skills. This is important to do because in the era of the industrial revolution 4.0, students are required to have creativity, critical thinking skills, communication skills, and collaborative abilities.

# 1.5.2 Specific Objectives

**a.** This research identified the students' worksheet that can be done to train students to think more critically with the materials provided based on HOTS.

**b.** This research developed the students' worksheet based on HOTS for fifth-grade elementary school students on second semester.

# 1.6 The Specification of the Study

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

The students' worksheet based on HOTS for the second semester of 5<sup>th</sup> grade was designed in to help elementary school teachers providing interesting and authentic learning activities for students. Thus, the students can relate the learning with their real-life activities.

### 1.7 Significances of the Study

Regarding the background, research problems, and research objectives, the research significances are explained theoretically and practically. It can be seen as follows:

# 1.7.1 Theoretical Significance

This research was conducted to contribute to the development of knowledge, especially about the development of students' worksheet based on HOTS for elementary school students.

# 1.7.2 Practical Significance

### a. For the students

This research was expected to be able to increase the students' critical thinking based on HOTS in learning English.

#### b. For the teachers

This research was expected to help the teachers in developed the learning activities based on HOTS that can improve the students' critical thinking for 5<sup>th</sup> grade elementary school students.

### c. For the future researchers

This research is expected to contribute new knowledge and information about HOTS-based students' worksheet. This research also benefits for the future researcher to conduct further research and can be used as a guidance for the teachers to develop students' worksheet based on HOTS.

# 1.8 Assumption of the Limitation of the Development

The syllabus was used to identify and define the topics contained in the HOTS-based students' worksheet for 5<sup>th</sup> grade elementary school students. The assumption and the limitation of the development of English learning activities based on HOTS is formulated as follows:

- a. The product is developed based on the syllabus of the 5<sup>th</sup> grade elementary school students.
- b. The product is developed for the second semester of the 5<sup>th</sup> grade only. Further research is needed in order to make the product betters.

# 1.9 Definition of Key Terms

# 1.9.1 Conceptual Definition

# 1.9.1.1 The Concept of HOTS

HOTS is the highest cognitive level hierarchy of Bloom taxonomy that involves the thinking activity. There are six levels of Bloom taxonomy,

namely recalling, understanding, applying, analyzing, synthesizing, and evaluating. The Bloom taxonomy has been revised by Anderson and Krathwohl (2001) into six levels, namely remembering, understanding, applying, analyzing, evaluating, and creating. Remembering, understanding, applying are categorized as lower order thinking skills. Meanwhile, analyzing, evaluating, and creating are classified as higher order thinking skills.

# 1.9.1.2 The Concept of Learning Activity

The learning activity is the way for looking someone learns or not during the lesson. Many kinds of research had proven that the learning activity is important on the learning achievement. According to Hamalik (2001) in Nofrion & Wijayanto (2018), learning activity is the activity that done by the students during the learning process. It can be physical activity to psychic activity. The learning activity is the process of interaction between the teacher and the students to achieve the learning goal.

#### 1.9.1.3 The Criteria of Good Worksheet

Students' worksheets have several criteria from BSNP (Badan Standar Nasional Pendidikan) (Suryani, 2018). There are including the feasibility of content, language, presentation, and graphics. Feasibility content is the teaching material that is conveyed in the worksheet. Specific, precise, accurate, and up-to-date from the publisher's point of view are the criteria. The language aspect, including vocabulary, sentence structure, paragraph length and level of interest, must be in accordance to students' interests and cognition. Feasibility of presentation concerns learning

objectives, the order of the level, the attraction of student interest and attention, ease of understanding to exercises and questions. Graphic eligibility is concerned with the physical appearance of the book, size, print, paper, letters, colors, and illustrations. Feasibility of the context, such as whether there is a link between the materials taught and real-world circumstances that students face, whether the learning materials encourage students to realize the relationship between the materials and their application in daily life, and so on.

### 1.9.1.4 The Definition of Young Learners

Wright (2001) in Ernawati et al. (2019) states the age range of young learners is between five to twelve. Piaget as cited by Cameron (2005) in Ernawati et al. (2019) states the children are active learners who have huge curiosity on learning something new and they are more enthusiastic and livelier. The children also easily lose their interest and they can keep motivate themselves on tasks if they find it difficult. Adult learners have different characteristics from young learners. Because of that, it needs to have different strategies to teach young learners.

### 1.9.2 Operational Definition

#### 1.9.2.1 HOTS

According to Nofrion & Wijayanto (2018), HOTS learning is a learning that develops students' higher-order thinking ability of. It is the power to memorize/recall, restate, remember and refer without scientific reasons. Questions and tasks in learning are useful for transferring, processing, and applying concept, including using the knowledge to resolve

the issues, and reviewing ideas and knowledge critically. Effective learning strategies will help students practice their higher-level thinking skills.

### 1.9.2.2 Learning Activity

The learning process activities are deign based on the 2013 curriculum. The teacher should create more advanced learning activities. Advanced learning activity is a learning activity that requests the higher-thinking skills process that characterized as processing, analyzing, communicating, dialogue, discussing, collaborating, presenting, and constructing. Silbermen (2006) in Nofrion & Wijayanto (2018) argues that one indicator of effective and efficient learning activities is the availability of many tasks that challenge students to use the brain to think hard and challenge the students. By giving challenging tasks and exercises to the students, they will have space to develop their thinking skills. The questions must be at level 3 that characterized as analyzing, evaluating, and creating. The high-level questions will make the students discuss with their friends and the collaboration will occur in this activity. The problem that needs the skills of analyzing, synthesizing, and evaluating is the problem that can improve the students' problem-solving skill.