

# CHAPTER I

## INTRODUCTION

This chapter shows the research background of the study, research problem identification, research problem limitation, research questions, the purposes of the study, product specification, significance the study, assumption and the limitation of the study, and key term.

### 1.1 Research Background

The Pandemic Covid-19 has been affecting the educational system in Indonesia. Indonesia's Minister of Education and Culture has implemented policies to address the situation. As stated in the Circular Letter of the Minister of Education and Culture in Indonesia Number 4, 2020, teaching and learning should be carried out from home to reduce face-to-face interaction during the Pandemic and prevent the spread of the dangerous Covid-19 virus (Rahayu & Wirza, 2020). The learning process is known as e-learning, which requires the teacher to deliver materials, conduct discussions, and assess students via an online platform. According to Purwaningsih et al. (2021) e-learning or online learning delivers education through a digital medium using electronic tools (computers and mobile devices) connected to the internet. Implementing this new system for some students who do not have adequate learning media such as handphones or laptops makes them difficult to access learning material. And for the teachers who do not understand the use of technology for teaching during the Pandemic will present new challenges during the teaching and learning process. Moreover, English has become a mandatory subject for secondary students who require a lot of attention because they do not use English daily, making English difficult for them to understand (Budiman & Krisfani, 2020).

English has become a foreign language in Indonesia and one of the mandatory subjects listed in the 2013 curriculum. According to Amir (2018), the main goals of the 2013 curriculum are to form graduates with adequate competencies and skills that will help them compete in the modern era. One of the purposes of learning English is that the students are expected to be able to communicate in English in written and oral form to make them ready to face competition in this global era (Syafi'i & Gestanti, 2017). It indicates English has become necessary in international communication that students then have to be mastered. Students are not only able to communicate but also need to have great competence and critical thinking to prepare themselves to become successful graduates who can succeed and survive in this modern era.

The ability to think critically is essential in preparing graduates to work and compete in the 4.0 industrial revolution era in the twenty-first century. The demands of 21st-century learning include teaching students to be more critical, creative, collaborative, innovative, self-sufficient, and problem-solvers (Singh & Marappan, 2020). The way of thinking is more critical covered in the higher-order thinking (HOT) of Bloom's Taxonomy cognitive domain. Aderson and Kratwohl as cited in Daniati & Fitrawati (2020) state the higher-order thinking domain consists of three cognitive levels: C4- analyzing, C5- evaluating, and C6- creating. Tan and Halili, (2015) state, higher-order thinking skill (HOTS) is the ability to think critically and creatively, solve problems, and develop decision-making skills. Allowing students to find new information by themselves to solve the problems and freeing them to express their opinions or ideas in the learning process will give them a positive result in achieving their higher-order thinking skills during the learning process. Therefore, it is expected that HOTS can help prepare students to be generations who can face the demands of

21st-century learning, which emphasizes critical thinking, creativity, independence, and problem-solving skills.

The demands of 21st-century learning make HOTS become one of the components that should be implemented in the learning process. Teachers must develop learning activities that evoke students' HOTS, creativity, and critical thinking. Based on Amir (2018), in 21st-century learning, students must be active and independent during the learning process. Designing activities inviting students to solve the problem and find the information alone can increase their creativity and critical thinking. In Malaysia, curriculum development uses HOTS to train students to prepare them to be an innovative generation and ready to face global competition in the future (Ismail et al., 2017). The students trained with HOTS will be able to use their knowledge, critical thinking, and creativity to increase their competence to face the competition in the upcoming era. According to Daniati & Fitrawati (2020), implementing HOTS in the learning activity can develop critical thinking skills to evaluate information, and students need to think critically in the real world. With the development of technology and information in the 21st century, it requires students to have HOTS to select important information from social media or other sources to get factual and essential information to increase their knowledge. Moreover, the curriculum 2013 became the guideline for the teacher in the teaching and learning process to develop relevant material content, learning processes, and assessments based on HOTS (Kusumastuti et al., 2019)

Unfortunately, not all of English books provide learning material content that relevant to HOTS and can increase students' critical thinking. Daniati & Fitrawati (2020) find that the content of English books for Junior High School that students and

teachers use to provide learning material and exercises still lacks HOTS. The result of the study showed that the content of HOTS-based reading questions contained in the book was only 18.9 % of 412 reading questions, and most of the learning questions are still dominant cover in LOTS. In line with Sucipto & Cahyo (2019) who state that the content of reading activities based on HOTS and LOTS was categorized as equivalent in terms of the implementation of the middle cognitive level, namely "apply" and "analyze". Additionally, teachers are focused only on transferring knowledge rather than practicing students' thinking skills (Kurniawati, 2019). Consequently, the implementation of HOTS is not optimal, and the teacher's learning media does not support the promotion of HOTS during the learning process as required by curriculum 2013.

Furthermore, due to pandemic Covid-19, the implementation of e-learning during the pandemic situation is ineffective and has not improved EFL students' higher-order thinking skills (Purwaningsih et al., 2021). During online learning, some students struggle to understand the information or concepts given by the teacher, and they struggle to solve the problems. Based on Purwaningsih et al. (2021) the implementation of HOTS method during online learning in a pandemic situation does not successfully implement for all students in the class. In addition, students also face unstable networks during the learning process, and they struggle to upload the task (Rahanyamtel, 2021). The students who have a problem with an internet connection cannot access the learning material given by the teacher, which can decrease the quality of learning.

According to Budiarta et al. (2021) an English activity book can be a great solution during pandemic learning due to a lack of internet connection. Activity books

designed with attractive pictures and colors will increase students' motivation to learn so that activity books can help students improve their English skills. Learning media activity book is included in graphic media because it contains full-color images and emphasizes increasing student skills by providing activities such as matching, pasting, etc. (Kurnia et al., 2021). Providing various good activities for the students can give an impact on students' motivation and creativity in the learning process. Following the purpose of curriculum 2013, which emphasizes training students in critical thinking, creativity, and problem-solving skill, activity books can be a solution for the teacher and students to achieve learning achievement and increase students' higher-order thinking. Based on Mega and Handayani (2020), from needs study analysis related to implementing HOTS-material, 68% of students prefer to use activity books to increase their higher-order thinking skills. This indicates that activity books can be great learning media to train students' higher-order thinking skills.

An activity book is classified as interactive learning media because it is packaged with attractive pictures and colors (Kurnia et al., 2021). According to Arshad, as cited in Kurnia et al. (2021) learning media can provide these benefits during the learning process. First, learning media provide clear information and improve the learning process. Second, learning media can improve students' motivation in learning and build interaction between students and their real life. Third, learning media is not hindered by space and time. Last, learning media can give students reflection on real life that can give them experience related to events that occur in their daily lives. From these benefits, the criteria of good activity books for the students. Activity books should contain good activities with clear directions that can increase students' creativity, critical thinking, and problem-solving, which can help

them to comprehend the learning material better (Daniati & Fitrawati, 2020). Activity books should be designed attractively to increase students' motivation in learning. Then, good activity books should be contextual that can reflect real situations or conditions so the students can connect the activities in the book with their real life (Haque et al., 2018).

Teachers also have an important role in helping to direct students during the implementation of HOT during the learning process. Since HOTS is a part of curriculum 2013, the teacher should understand the concept of HOTS very well and be able to implement it in the teaching and learning process. According to Pusparini and Sarosa (2020), the teachers have a role in developing HOTS during the learning process, and teachers have to upgrade their knowledge to adapt the implementation of HOTS to the current situation, especially in the globalization era. Trenholm (2017) says the teacher also has a role in determining the curriculum, teaching methods, and assessment during the learning process. Teachers' knowledge about HOTS will influence how the teacher designs learning activities and determine student learning strategies. If the teacher can design HOTS-based learning activities that are interesting, creative, and reflect on their lives, it greatly impacts students' HOTS development. To improve teacher knowledge and competence in implementing HOT, the teacher can do some efforts, including following training, participating in education programs (KKG, MGMP), webinars, workshops, etc. (Susilowati & Suyatno, 2021). If the teacher's competence in implementing HOT is good, the thinking ability of the students will be improved.

This study was carried out at SMPN 3 Singaraja in Buleleng Regency. The researcher interviewed one grade 9 English teacher in that school with the initial (NM).

The teacher said that the teaching and learning process at SMPN 3 Singaraja was still online. Based on the interview results, the teacher said that she was familiar with HOTS, and the teacher could mention some of the thinking skills contained in HOTS. In implementing HOTS during online learning, the teacher used learning media such video and picture. In providing learning material and exercises for students, the teacher used interactive book provided by the school.

The researcher then analyzed the interactive book for grade 9 used as a reference by the teacher in providing materials and exercises. The researcher found that from 117 learning activities provided in the book, only 38 of them could be categorized as HOTS-based activities and 79 categorized as LOTS learning activities. Therefore, activities and practice questions that are LOTS-based are still dominant in this book. The researcher realized that the learning activities in grade 9 teachers' interactive books do not fully implement HOTS. The exercises in the interactive book appear monotonous. In addition, in interactive books, teachers use less attractive images and are only full of text. As a result, students may become bored and unmotivated during the learning process.

In response to the lack of English textbooks, which promotes HOTS used by the teacher and low motivation from the students during the learning process, the existence of supplementary English learning activities handbook is needed by teachers and students to develop students' HOTS during learning. This research focused on developing a product in the form of a HOTS-based English supplementary learning activities handbook for ninth-grade first-semester students in Junior High School. The study aimed to create a creative and attractive learning media that can help both teachers and students implement HOTS that can be used both offline and online

learning. The activity handbook contains a collection of worksheets that teachers can use to provide creative learning activities that can improve students' higher-order thinking. For the students, the activity book can get several benefits. One is to increase students' motivation in learning because the book covers with attractive colors and pictures. In addition, the activity book contains various activities that encourage students to discuss, solve problems, think critically, and be more creative. If the students already have these skills, the learning quality and students' English proficiency will be improved.

### **1.2 Research Problems Identification**

During the learning process, the teacher finds some difficulties in implementing HOTS. The problem that the researcher found is that the teacher's English handbook contains mostly low HOTS-based learning activities. The LOT learning activities or exercise provided in the activity handbook is still dominant here. The learning activities in the teacher's book seem monotonous with less tractive images and full of text, making students unmotivated and bored during learning. Based on the interview, the teacher said the vocabulary used in the book is quite challenging for the students to understand. The teacher also said that he often looks for online learning materials on the internet. The researcher then realized that teachers still have difficulties designing and developing appropriate and HOTS-based learning activities for students.

Based on the interview, the teacher also faced several problems when conducting the lesson, especially during online learning. Some students lack an internet connection, so they cannot access the learning material given by the teacher. Some students do not have learning media handphones, making them have difficulty



following the learning process. The problem faced by many teachers is the lack of student motivation to take lessons and make assignments. All these problems greatly affect the quality of learning, and the students will find it difficult to accept the information or material given by the teacher.

Considering all the problems, the researcher was interested in knowing more about what learning activities can improve students' higher order thinking and how to develop an English activity handbook with HOTS-based learning activities. Activities book was expected to help teachers and students provide interesting and interactive learning activities. So later, it can help increase students' motivation to learn and improve their critical thinking skills. If students can think critically, the learning target can be achieved easily, and increase student's competency in learning English.

### **1.3 Research Problem Limitation**

The limitation of this study was focused on developing an English supplementary activities handbook for grade ninth Junior High School students in the first semester. The researcher found the learning topic provided on the syllabus for ninth-grade students, especially in the first semester, very interesting. The material in the syllabus includes congratulation, intention, hope, and wish. All these materials are basic materials that students in their daily lives often use. If students are given an interesting HOTS-based activity book, they can be motivated to learn and improve their critical thinking skills, problem-solving, and creative thinking abilities. So that after doing the exercises, students are expected to be able to fluently communicate and master the material contained in the syllabus well. In addition, students are expected to master the language expression in the topic and use it in everyday life.

#### **1.4 Research Questions**

Based on the explanation above, the problems investigated in this study are as follows:

1. How to develop a HOTS-based supplementary English learning activities handbook for ninth-grade first-semester students of junior high school?
2. What is the quality of the HOTS-based English learning activities handbook?

#### **1.5 The Purposes of the Study**

1. To develop a HOTS-based English learning activities handbook for ninth-grade first- semester students of Junior High School.
2. To identify the quality of HOTS-based English learning activities for ninth-grade first-semester students of Junior High School.

#### **1.6 Product Specification**

This study aimed to create learning media in the form of a book that junior high school students can use. The developed book was in the form of an English learning activities handbook that contained various exercises with instructions and teaching procedures. Unlike other books, the book developed in this study is based on HOTS (Higher Order Thinking Skill), so the contents of the book learning activities in the form of exercises that improve students' higher-order thinking skills such as analyzing, creating, and evaluating. HOTS-based English activities handbook that develops can train and evoke students' creativity and problem-solving which all of these skills are used to reach learning targets. The activities designed contain the material based on students' cognitive levels in combination with learning activities that can improve and practice students' critical thinking. In addition, this book was designed in an attractive manner that contains pictures and caricatures that can make students more interested.

This book also developed with creative and various activities with contextual examples that require students to think more critically.

### **1.7 Significance of The Study**

The result of this study provided renewal of learning tools in the form of the HOTS-based activity handbook used to practice students' higher-order thinking skills.

The benefits of research are as follows:

#### **1. Theoretical Significance**

This study can give renewal in providing English learning activities which promote HOTS and increase students' creativity in learning.

#### **2. Practical Significance**

##### **a. For Students**

For students, particularly junior high school students in grade 9, this study's result is expected to improve their critical thinking and comprehension of English. In addition, they can take advantage of books that have been developed to increase learning motivation and be an effective learning resource in achieving learning targets.

##### **b. For English Teachers**

The result of the study in the form of a product can help teachers provide learning resources for students and more easily direct students to achieve learning targets.

##### **c. For Institution**

The result of this study is expected to provide references in developing books and improving the quality of the school in terms of improving students' cognitive abilities in learning English.

d. Next Researcher

The result of this study is useful for the next researcher who wants to develop learning strategies or tools to improve students' higher-order thinking in learning English.

### **1.8 Assumption and the Limitation of the Study**

The activities handbook designed and developed was in the form of a learning activity handbook that was focused on promoting HOTS in learning English. The selected topics are based on the identification and analysis of learning materials studied by junior high school students, especially junior high school students in the first semester.

1. The product that was designed and developed used syllabus as guided lines and adapted to the needs and characteristics of grade 9 junior high school students in the first semester.
2. The product developed was only specifically used and given to 9th-grade students and teachers of junior high school.

### **1.9 Definition and Key Terms**

In the product development process, a key term is often used, namely "HOTS". Below are the conceptual and operational definitions of HOTS, which are explained conceptually by several experts.

a. Conceptual Definition

According to Daniati & Fitrawati (2020) the Bloom Taxonomy Cognitive Level was first coined by Benjamin in 1956. Based on Bloom's Taxonomy cognitive domain, the way of thinking is divided into 2 levels: LOTS (Lower Order Thinking Skill) and HOTS (Higher Order Thinking Skill). Benjamin (1956), was conceptualized

HOTS consist of 3 cognitive levels, C1 Understanding, C2 Remembering, and C3 applying. HOTS consist of 3 cognitive level C4 is analyzing, C5 synthesizing, and C6 evaluating. However, the cognitive level in HOTS was revised by Anderson and Kratwohl which shifted the HOTS cognitive level into the new version, so it becomes C4 analyzing, C5 evaluating, and C6 creating (Anderson and Kratwohl, 2001, as cited in Daniati & Fitrawati, 2020). At the cognitive level of analyzing students, HOTS can understand the concepts of the material being studied and rearrange the parts of the concept into an orderly, easy-to-understand structure. At the cognitive skill level evaluation, students' ability to draw conclusions, ideas, or values from the information they learn is based on certain criteria. In the cognitive level of creating, students can create a work or product based on the knowledge and ideas they have obtained from sharing knowledge resources.

Kurniawati (2019) states that HOTS have an important role in the educational field, especially in the teaching and learning process, because the ability to think critically leads the process of learning to become more effective. In addition, critical thinking skills are necessary and must be improved because they play an important role in helping to develop effective language learning (Shirkhani & Fahim, 2011). Another expert-defined HOT is the ability to transfer information, think critically and the ability to solve problems faced in real life (Daniati & Fitrawati, 2020). Murniarti et al. (2021) state HOTS is a thinking skill that is not only a skill in remembering but also includes the ability to analyze, evaluate, and create.

#### b. Operational Definition

The development of technology and science, accompanied by globalization in the 21st-century nowadays, affects progress in all fields, including education.

Education is the main basis for preparing students to face the challenges that may be faced in this era of globalization (Murniarti et al., 2021). The development of science in the globalization era that is increasingly advanced makes the Indonesian Ministry of Education spark the 2013 Curriculum, which becomes HOTS as one of the requirements for its implementation. In implementing the 2013 curriculum revised in 2017, HOTS became one of four requirements that must be implemented in the learning process. Education in this modern era must implement learning activities that lead students to develop their high-order thinking to be able to compete in the outside world (Warmadewi et al., 2019).

Even though HOTS is one of the bases for implementing the 2013 curriculum, many teachers still do not understand the HOTS concept, and implementation of HOTS in the learning process is still lacking (Warmadewi et al., 2019). The HOTS ability possessed by students will help them analyse the truth of information from various sources and make it easier for them to create new, innovative and creative ideas (Kurniawati, 2019). Therefore, teachers and educators have an important role in implementing HOTS in the learning process. To improve students' HOTS abilities, teachers must be able to provide students with learning practices that generate a sense of students' critical thinking (Stupnisky, Renaud, Daniels, Haynes, & Perry, 2008, as cited in (Setyarini et al., 2018)). In implementing HOTS in schools, teachers can pay attention to the learning components given to students. Learning components such as lesson plans, learning activities, and assessments must be considered and evaluated in the application of HOTS in the learning process to achieve the student's goal of having HOTS (Warmadewi et al., 2019).