CHAPTER I

INTRODUCTION

This chapter provides an explanation of the research background of the study, as well as the identification of the problem, the limitation of the study, the research questions, the goal of the study, the research objectives, the importance of the study, assumptions, and definition of key terms.

1.1 Background of the Research

The 2013 curriculum has been implemented in many schools since 2013 in Indonesia, which aims to respond to an increasingly advanced and developing era. According to Ekawati, (2017) this curriculum focuses on achieving student competence and character building. Instead of teachers, students are the primary emphasis of this program. Because of this, students must be allowed to engage fully in the educational process. It is hoped that the implementation of 21st century learning would be possible in the 2013 curriculum. Teaching and learning in the 21st century must emphasize critical thinking, problem solving, decision-making, and the creation of something new (Warmadewi et al., 2019). Developing 21st century skills allows students to make more logical choices and develop their critical thinking abilities to make better decisions (Ratama et al., 2021).

4C or four learning characters were designed in response to 21st-century qualities and expectations: (1) Critical Analysis and Problem Solving; (2) Creativity and Innovation; (3) Communication; and (4) Collaboration (Astuti et al., (2019). Therefore, teachers in schools are required to be able to design lessons using HOTS

(High Order Thinking Skills). A key component of communication is the capacity to convey ideas effectively both verbally and in writing. Collaboration is the process of working together to solve complicated issues while exchanging ideas in the direction of a common goal. Other abilities like communication and the capacity to look at, analyze, interpret, and evaluate the data are included in critical thinking. The ability to come up with original ideas and solutions is how creativity is characterized.

Thinking abilities are the most fundamental abilities that can be gained in the classroom and are essential for all students to succeed in their goals. According to Hamdi et al., (2018), fundamental thinking abilities can aid students in making decisions, resolving issues, and achieving objectives. These 21st-century thinking abilities are crucial for moving forward in daily life. They are a key part of the century (Thomas and Smoot, 1994 and Huitt, 1998, as cited in Rezaei et al., 2011). The teacher must be able to guide and control students' core thinking in this situation.

High Order Thinking (HOT) and Low Order Thinking (LOT) are two categories of thinking abilities. The first is called LOTS (Low Order Thinking Skill) and consists of three components: C1 (remembering), C2 (understanding), and C3 (application). The second category is called HOTS (High Order Thinking Skills), and it consists of C4 (analyzing), C5 (evaluating), and C6 (creating). According to Fakhomah, et al. (2019), High Order Thinking (HOTS) refers to thinking at a higher level than remembering facts, memorizing, recognizing or repeating. Higher order thinking skills involve analyzing, reflecting, debating, applying various concepts, organizing, reasoning, decision making, and creating. High order thinking skills, or

HOTS, are one of the conditions used to balance 21st century education. According to Kurniawati, (2019) HOTS is an activity that involves analysis, evaluation, and creating something. Applying HOTS in the classroom also requires more than just giving students higher order thinking questions; on the other hand, students should be taught how to convey thoughts well (Tan & Halili, 2015).

The Bloom's Taxonomy is used to determine HOTS. Thinking levels are ranked in Bloom's Taxonomy from lowest (C1) to highest (C6). The lowest C1 skill is remembering, followed by C2 comprehension, C3 application, C4 analysis, C5 evaluation, and C6 creation. There are distinct purposes and functions at each level. Low Order Thinking Skills are levels C1 to C3 (LOTS). C4 through C6 are considered high order thinking skills (HOTS). Anderson et al., (2001) assert that analyzing becomes a crucial component of HOTS. Understanding and expertise are necessary for analysis in order to move into more complicated categories, such C5 and C6. Some teachers and students perceive HOTS incorrectly. The learning process can be impacted by incorrect comprehension of the HOTS idea, which makes the learning process useless and worthless.

In Indonesia, most teachers are less able to distinguish between HOTS and LOTS in their application. In the HOTS steps, students must go through the process of analyzing, evaluating, creating. Most teachers in Indonesia only apply LOTS to learning activities such as in terms of types of questions, reading texts, and others. It makes the results received are not as desired in this era (Rapih & Sutaryadi, 2018). The teacher's lack of understanding in planning exercises that can improve students' thinking skills is one of the elements that causes Indonesian students' thinking abilities to be overwhelmed by low-level thinking (LOT). This is supported by

research conducted by (Afifah & Retnawati, 2019) which stated that some teachers are still having trouble teaching HOTS. In their research, teachers encountered the following issues when instructing HOTS: (1) Teachers still lack the understanding of HOTS; (2) Teachers struggle to convey concepts to students; (3) Teachers struggle to design and implement assessments based on HOTS; (4) Teachers struggle to deliver HOTS-based learning materials; (5) Teachers struggle to create learning media based on HOTS; and (6) Teachers struggle to create learning tools based on HOTS. Furthermore, students in Indonesia have fundamental thinking skills at levels 5 and 6, according to an OEC&D research conducted in 2016; just 0.8% of members had abilities below those levels. 42.3 percent of Indonesian pupils are unable to perform at a level 2 or lower. Low Order Thinking Skill still dominates Indonesian students' thinking, according to research (LOTS). When teachers implement the 2013 Curriculum's aim of teaching children how to learn through observation rather than just teaching them, they play an important role. Language and innovation in communication are also major themes. Teaching HOTS to students requires teachers to become specialists in the subject. Teachers must be trained by the government in order for HOTS to be applied successfully in students. Students may learn how to develop these skills by following along with their teacher while they study HOTS.

In accordance with Miterianifa et al., (2021), HOTS students possess logical, critical, reflective, contextually, and creative thinking abilities. Additionally, students who receive training in developing HOTS will use their knowledge, abilities, and values while thinking, reasoning, making decisions,

solving issues, and creating new things. Therefore, HOTS is a crucial learning process to make sure that students can think critically and solve issues.

Several studies on HOTS have been carried out such as a study was carried out by Feronica et al. (2021). The adoption of Higher Order Thinking Skills in the classroom is the subject of this study. The outcomes of this study show that L2 teachers are aware of and believe in their responsibilities to integrate HOTS in their instruction. A study also conducted by Alya et al. (2021), she examined the Stimulating Higher-Order-Thinking Abilities (Stim-HOTs) model's effectiveness in enhancing students' critical thinking abilities in relation to cell metabolism. This study was conducted in a high school in Surakarta, Indonesia, using a pre- and posttest control group design that was quasi-experimental in nature. To gather the data, experts validated and empirically verified an essay-based critical thinking skills test instrument. Critical thinking scores were higher in the experimental group than in the control group, with an average of 0.66 compared to 0.51 in the control group. Besides that, Derkhachadourian (2019) also conducted a study about students in a public speaking class were able to use PowerQuest technology to participate in higher-order thinking abilities in a self-study situation with current and genuine material when they tried it.

This research was conducted at a school in Buleleng Singaraja Regency. On December 10, 2021, the researcher had an interview with an English teacher with the initials NW. The teacher is in charge of teaching the eighth-grade students in English. The teacher also informs the researchers that English is a topic that must be taught in schools. The school-prepared textbooks and syllabus are used by the teacher to teach English. The book includes instructional tools that the teacher uses

to ask students questions and give explanations. Teachers also utilize school-related literature as a reference when supplying learning materials and practice questions. Additionally, the 2013 curriculum, which has been transformed into a driving curriculum, is the syllabus that the teacher uses. In teaching English, the teacher uses the syllabus reference as a reference in developing learning materials.

The teacher is already familiar with HOTS but does not fully comprehend it when she teaches the eighth-grade students. Additionally, teachers are confused of the usage and explanation of HOTS. The teacher also mentioned how difficult it was to apply HOTS to students. The only assignments the teacher provided the students throughout the English lesson were games, individual assignments, and group assignments. Before the pandemic, the teacher employed the HOTS approach and practice questions with the class, but the students had trouble understanding the lessons. When teachers assign questions that call for HOTS, students typically wonder what the questions mean and why they are being assigned. When students are given questions that require HOTS, students ask the teacher the meaning of the questions and ask the purpose of the questions. The teacher concluded that when offered tasks or exercises including HOTS, students had some difficulty. To determine which tasks are more difficult, teachers may also give exercises based on the HOTS. Teachers can assess the degree of students' potential.

The researchers interviewed an English teacher in Buleleng Regency before analyzing the worksheets that were utilized in class. The researcher discovered several practice questions and illustrations from books that would engage students in this worksheet. But the book's practice questions were the only ones the researchers could find that didn't help students develop their higher order thinking

abilities. The researcher only found that the practice questions were still at the LOT level because most of the activities in the books used by teachers when teaching were classified into C1, C2, and C3, for example, the activities in the book only ask students to complete the missing letter, practice the dialogs with their friend, answer the following questions, and listen to the audio and students have to answer the question given, etc. There are several activities in the book that are included in C6 such as asking students to make dialogues. However, the six topics in this book include: 1) expression of attention, expression of checking understanding, expression of giving compliment, and expression of asking and giving opinion; 2) expression of giving and asking capability, and expression of willingness; 3) expression of obligation, expression of prohibitions, and expression of suggestions; 4) expression of giving instruction, expression of inviting, and expression of asking for permission; 5) greeting card, and 6) expression of asking for and providing information about the existence of people, object, animals, all activities are very monotonous because they are always repeated from topic one to topic six, so there is no variation. It can be seen from the existing instructions and the activities presented which of course will make students bored in doing it. It can also reduce students' motivation in learning.

From the findings above, it can be concluded that junior high schools, precisely at SMP N 3 Singaraja, have not implemented the HOTS strategy. It is clear from the evidence gathered that a teacher must have a full understanding of HOTS before explaining concepts and assigning exercises connected to it. Therefore, the development of HOTS-based English learning book for eighth-grade in the first semester of junior high school is very important. This book adapts the

syllabus used by teachers with the aim that students and teachers can use the HOTS-based English learning activity book to support the achievement and learning process in English.

The activities in this book are adjusted to the level of critical thinking in Bloom Taxonomy starting from C4 (Analysis), C5 (Evaluation), and C6 (Creating). This study uses the ADDIE model which consists of analysis, design, development, implementation, and evaluation. In developing this product there are two procedures that are followed, namely the first procedure to develop a product which includes analysis, design, and development. The second is the procedure on the quality of the HOTS-based book which includes implementation and evaluation. Therefore, the researcher formulated two research questions: first, how to develop HOTS-based English learning activities handbook for eighth grade students in the first semester and second, how is the quality of HOTS-based English learning activities handbook for eighth grade students in the first semester.

1.2 Research Problem Identification

Students must be expected to possess character trait 4C and more knowledge in order to compete in the real world in the future. By learning to assess issues in their surroundings, students should be able to stay up with technological advancements. Learning in the 21st century must be more sophisticated, contemporary, and dynamic than conventional learning.

Obstacles to HOTS deployment were discovered during the preliminary interview.

- In the first place, teachers are still unsure of how to implement HOTS-based learning, so they continue to employ LOTS like reading dialogues and assigning individual or group tasks without providing students with activities that encourage them to think critically about the solutions.
- 2. Second, there are three English teachers in SMP N 3 Singaraja and eighthgrade junior high school students need a reference source for various quality and varied English learning activities.
- 3. Third, from two books used by English teacher in junior high school eighth-grade students all of them only require students to master C1, C2, and C3 (*Low Order Thinking Skills*). The activities contained in the book have not fully implemented C3, C4, and C5 (*High Order Thinking Skills*).
- 4. Fourth, there is an imbalance between the material, skills, and activities described in junior high school English textbooks and the actual conditions in the field.
- 5. The last is junior high school students need English learning books to prioritize HOTS activities to train and develop their ability to be critical, solve problems, and make strategic decisions.

1.3 Research Problem Limitation

The limitation of the research in this study uses the students of class VIII SMP in semester 1 focused on developing HOTS for learning English. All activities are carried out to assess the quality and effectiveness of HOTS development, especially for class VIII SMP semester 1 at SMP N 3 Singaraja.

1.4 Research Questions

The research questions can be formulated as follows, based on the study's background:

- 1. How to develop HOTS-based English learning activities handbook for eighthgrade students in the first semester?
- 2. What is the quality of the HOTS-based English learning activities handbook for eighth-grade in the first semester?

1.5 Research Objectives

The research objectives can be formulated as follows, based on the study's background:

- 1. To develop HOTS-based English learning activities handbook for eighth-grade students in the first semester.
- 2. To determine the quality of the HOTS-based English activities handbook for teaching English in the first semester of eighth grade.

1.6 The Expected Specification of the Product

The following is the predicted specification of the product in this proposed study:

 It is expected that developing or designing HOTS-based English learning activities can help students to learn English in more critical way and more creative. 2. As the HOTS-based English learning activity is developed to teach students, teachers in the EFL class can provide material that can train students' critical thinking, especially in English.

1.7 Significance of the Study

The results of this study are expected to determine the effectiveness of books in improving the ability of students to understand and think critically in learning English. The benefits or uses of this research are as follows:

1.7.1 Theoretically

The findings of this study are expected to be beneficial for the theory of teaching and learning, and the theory of material development.

1.7.2 Practically

a) For students

The outcomes of this study may help students enhance their critical thinking abilities while studying English and raise their excitement for the language.

b) For teachers

The outcomes of this study are expected to be a reference for carrying out learning activities that contain HOTS.

c) For Institution

The outcomes of this study are expected to provide a reference for students who will become prospective English teachers in designing HOTS-based learning activities.

d) Next Researcher

Researchers can find HOTS-based learning activities in special English lessons for eighth-grade students in the first semester. Other researchers can make references for the development of further research.

1.8 Assumption and the Limitation of the Development

The limitations of the development of a HOTS-based English learning activities handbook in this research can be stated as follows:

- a. HOTS-based English learning activities handbook as a product to be developed in this study is based on the syllabus and school curriculum, especially for eighth-grade students in the first semester of SMPN 3 Singaraja.
- b. The English learning activities in this study were developed only as prototypes that need improvement in the future.

1.9 Definition of Key Terms

The three key terms that are the focus of this research are as follows; the concept of high order thinking skills (HOTS), student worksheet, and junior high school students. The following definitions are explained more clearly below:

1.9.1 HOTS (High Order Thinking Skills)

According to (Miterianifa et al., 2021) inferring, drawing conclusions, synthesizing ideas, formulating hypotheses, contrasting and evaluating alternatives are examples of HOTS. According to Nachiappan et al., (2018), HOTS is the capacity to solve issues, make decisions, innovate, and create things using

knowledge, skills, and values that make sense and reflect. Critical thinking abilities are a must-have for everyone in the twenty-first century, especially students. As a result, in order for students to learn English, teachers must be able to deliver HOTS-based activities. Ultimately, the purpose of HOTS education is for students to be able to solve problems, make decisions, and meet learning goals by using critical thinking (Indriyana & Kuswandono, 2019). The ability to think critically is a must-have for everyone in the twenty-first century, especially students. Therefore, the teacher plays an important role in designing interesting learning activities and of course it can improve students' critical thinking skills.

1.9.2 Students' Worksheet

According to Amirin & Suparman (2019), worksheets for students provide guidelines and steps for solving problems to help students understand the topics. The activities contained in the worksheet refer to the learning carried out by students. When it comes to 21st-century learning, the activities on the worksheets need to incorporate interaction between teachers and students. Exercises should also assist students acquire the capacity to think critically, as well.

1.9.3 Junior High School Students

Junior high school starts from the age of 13-16 years. At this age students are still experiencing a transition from elementary school behavior to junior high school. It certainly affects the attitude of students in accepting learning. According to Mariana, et al., (2021), there is a considerable difference between the attitudes of male and female junior high school pupils about learning English. Study results

showed considerable disparities between male and female students' perceptions of men and women. In general, female students are more upbeat and interested than their male counterparts. The results showed a favourable attitude toward studying English.

