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, assumption, and the limitation of the development, definition, and key term.

1.1 Background of the Study

During the Covid-19 pandemic, learning was not conducted as usual. The government issued many policies to support the learning process from home. According to the Ministry of Education and Culture Circular No. 4 of 2020, regarding the implementation of educational policies in the emergency period of the spread of the Coronavirus, students are not burdened with demands to complete all curriculum achievements for class advancement and graduation. Learning is carried out to provide meaningful learning experiences for students. It focuses on life skills education regarding Covid-19. Assignments, and activities were tailored to students' interests and conditions, as well as considering gaps in access and learning facilities at home. The evidence and products of learning activities from home were given feedback qualitative in nature from the teacher without having to be a quantitative score. According to the ministry of education and cultue (2020), some online learning is carried out using *WhatsApp* and *Line* applications. However, for elementary school children who do not understand online learning, learning through smartphones can be challenging. Moreover,

learning English requires extra attention because English is a foreign language, so it is not a language used in everyday life of the students.

English language teaching for elementary school students in Indonesia is based on Surat Keputusan Menteri Pendidikan dan Kebudayaan No. 060/U/1993 on February 25. In the decree, it is mentioned that English as a local content subject in elementary school can be started from the fourth grade. According to Kuwat and Ghozali (2018), the earlier students start learning English, the better their competence will be. This is due to communication between nations that requires English as an international language. Hence, English proficiency is one of the skills that should be mastered by Indonesian students as early as possible. On the other hand, learning is a process of interaction between students and their environment, contributing to a change in behavior in a better direction. The most important is there is an involvement of all or most of students' self-competence, which will be helpful for them in the present and the future. It means that the knowledge students get can be applied to achieve their goals in the present or future. Besides, the students are also taught to understand and recognize ONDIKSHE themselves.

In this 21st century era, people try their best to be excellent and qualified human resources. The ways of thinking can influence the quality of human resources. Generally, there are two levels of thinking skills, especially for elementary school students. The first is LOTS (Low Order Thinking Skill) which consists of C1 or remembering, C2 or understanding, and C3 or applying. The second is HOTS (High Order Thinking Skills) that includes C4 or analyzing, C5 or evaluating, and C6 or creating. High-order thinking skill (HOTS) is the skill

needed by every individual in the 21st century. According to Astutik et al. (2020), in the 21st century, students should enhance and improve their high-order thinking skills, even when they are in elementary school. It is because this period is where the students think critically in various fields. HOTS are a thinking ability that requires not only the ability to remember but to think creatively and critically. Indriyana and Kuswandono (2019) argued that HOTS must be developed to analyze, evaluate, and create something based on the knowledge they get. In addition, HOTS can also indicate students' understanding of the material. Other than that, HOTS is crucial for students to determine the right decision in solving a problem through specific steps (Husamah et al., 2018).

In addition, the teacher has essential roles in facilitating and guiding the students in the learning process. According to Thamrin et al. (2019), HOTS skills must be included in developing student knowledge resources. Learning activities are designed to make students understand and apply their knowledge in real-life situations. Often in the classroom, some students are very critical, like to ask many questions, and express opinions. If students do this, the teacher should give them opportunities to ask questions, express opinions, and express their ideas. After these activities are carried out, the teacher can invite students to conclude what they have discussed and reflected on. Students' questions and responses at the HOTS level will form students' high-level critical thinking skills.

HOTS are determined based on Bloom's Taxonomy. In Bloom's Taxonomy, levels of thinking are categorized from the lowest (C1) to the highest (C6). The lowest C1 is remembering, C2 is understanding, C3 is applying, C4 is analyzing, C5 is evaluating, and C6 is creating. Each of the levels has different

functions and purposes. Levels C1 to C3 are categorized as Low Order Thinking Skill (LOTS).

Meanwhile, C4 to C6 are categorized as Higher Order Thinking Skill (HOTS). According to (Anderson et al., 2001), Analysing becomes the essential basis of HOTS. Analyzing involves understanding and knowledge to step into more complex categories, such as C5 and C6. Some teachers and students misinterpret HOTS. Mistakes in understanding the concept of HOTS can impact the learning process, which makes the learning process ineffective and unproductive.

According to Margana and Widyantoro (2017), the purpose of HOTS is to improve students' thinking skills at a higher level, especially in receiving lessons or any information. Learning is a process in which the students are being taught and systematically evaluated to achieve the desired learning goals. Learning has several components, namely learning objectives, learning strategies, learning methods, and learning evaluation. In the 2013 curriculum, several paradigm changes are used by teachers aimed to adjust the demands of the times and prepare human resources to be ready to compete in the future. 2013 curriculum has the purpose of training the students to learn by observing and not just being told. It also emphasizes creativity and language skills as a means of communication. Before students know and learn more deeply about HOTS, the teacher should be the person who knows well about the concept of HOTS. Teachers need to be given training from the government so that the application of HOTS to students can be implemented well. After the teacher knows what HOTS is, the teacher can explain and train the students to develop this skill.

According to Afifah and Retnawati (2019), teachers need to guide students to connect the concepts given with the concepts taught, especially in learning material that contains HOTS. The students need higher thinking skills. The teacher must design strategies and methods suitable for students so that HOTS can be implemented well. Learning development related to HOTS must pay attention to the stages of thinking in Bloom's Taxonomy. According to Yusmanto et al. (2017), cooperative learning models can be chosen to increase students' HOTS. Compelling and exciting learning materials, learning media, and learning strategies can motivate students to think more critically. Besides, the learning process can be more efficient and fun.

According to Maidinsah et al.(2019), HOTS students can think logically, critically, reflectively, met cognitive, and creatively. Furthermore, students trained to develop HOTS will apply knowledge, skills, and values in reasoning, reflecting, problem-solving, decision-making, innovating, and creating something new. Therefore, HOTS is an essential learning process to ensure students can think and solve problems critically. According to Tan and Halili (2015), HOTS is a skill needed by every individual in any educational environment. For example, in global economic growth, information, technology, and communication are rapidly developed. If every student or individual does not have HOTS, that person will not keep up with the times and less critical in analyzing information. According to Chinedu ("Strategies for Improving Higher Order Thinking Skills in Teaching and Learning of Design and Technology Education," 2015), HOTS involves information analysis to determine the problem, evaluate the problem, and create a workable solution. If students already have good HOTS, then it will be easy to process the information received. Many media can train students' HOTS,

including exercise books, photos, videos, and smartphones. According to Northrop and Andrei (2019), smartphones can facilitate the learning process to access various language and vocabulary applications that can improve student HOTS and can be applied. The more students practice their HOTS, the better learning outcomes will be achieved. The teacher must also prepare methods and strategies so that students can study hard. Besides, the teacher can also motivate students so that students get maximum results.

In making a worksheet, there must be some criteria that should be considered. According to Badan Standar Nasional Pendidikan (BSNP), there are five feasibility aspects of a good activity book. The first is the feasibility aspect of the graphic, such as the standard size of the book according to ISO is A4 (210mm) x 27mm), the book cover reflects the content of the book, the fonts used are attractive and readable, the placement of the fonts is consistent, and by the pattern used, the book does not contain too much fonts combination, the book layout is consistent. By the pattern used, the space between texts is consistent; the book contains learning activities, sub-title learning activities, and page numbers, the book presents illustrations and picture captions, the placement of titles, sub-titles, and picture captions does not interfere with understanding; the space between words and text is standard, the illustrations included are creative and dynamic. The second is the feasibility of the content such as; the materials presented cover the materials in the KTSP syllabus, the materials presented to support the objectives in KTSP syllabus, the pictures displayed can be found in everyday life and equipped with explanation, the activities suggested are based on real-life situations, the activities included stimulate students' creativity. The third is the feasibility of the presentation such as; the activities presented can improve students' high order thinking skill, the book contains information about the book's roles in the learning process, the presentation of the material is interactive and participative (encourages the students to participate in the learning process actively), the activities presented show the connection with the content, the materials put-in demonstrate the unity of the theme. The fourth is the feasibility of the linguistic features such as the sentences included are simple and easy to be understood by the students, the language used is suitable with the materials and the illustrations, the language used to increase students' curiosity, the sentences written are corresponding with students' development, the scope of the materials is appropriate with students' level. The fifth is the feasibility of the context, such as there is a connection between the materials taught and real-life situations face by the students, the learning materials encourage the students to understand the relation between the materials and the application in daily life, the learning materials stimulate the students to find their knowledge, there are questions which can enhance students' thinking skill, there are group activities that motivate the students to interact effectively. According to Suryani (2018), in some situations, a worksheet serves as the basis of students' language input and language practice that occurs in the classroom. It is because students do not know English. However, with English worksheets as a medium of learning, students can read and understand the meaning of the words. Therefore, the language used in the worksheet is basic English that is easy to be understood by students. In addition, attractive design becomes one of the criteria of a good activity book. If the design is attractive and colorful, students' interest will increase. When all criteria of a good book activity are fulfilled, the book becomes a good learning media that the teacher can use to provide materials for the students.

This research was conducted at one of the schools in Buleleng District, Singaraja. The researcher interviewed one English teacher whose initial is SW on July 7, 2020. The teacher was in charge of teaching English to grade students and also became a homeroom teacher. The teacher said that at the school there was no English teacher, who only taught English subjects. Homeroom teacher concurrently teaches all subjects except religious subjects. The teacher also gave the researcher information that English lesson was a subject that was not required to be taught at the school. At the school, the teacher taught English once a week. The duration was 2 lesson hours or equal to 70 minutes in 1 week. In teaching English, the teacher used a book prepared by the school and a syllabus. The book contained learning materials that the teacher used to give questions and explanations to the students. In addition, the teacher used books from the school as guidance in giving learning material and exercises.

Meanwhile, in giving questions during the midterm test, the teacher looked for the internet and other sources. For the final exam, the questions were given by the school. Furthermore, the syllabus employed by the teacher was by KTSP and not the 2013 curriculum. In teaching English, the teacher did not use syllabus references.

In teaching fourth-grade students, not all teachers know and understand what HOTS is. Many teachers do not know about HOTS explanation and use. The government has conducted training related to HOTS for English teachers, but not all teachers could train. The government conducted the training, but only 1 English teacher could participate in the training to represent the school. Besides, most teachers were reluctant to attend the training because the teachers at the

school thought that joining the training could not increase their position. In addition, the teacher said that the application of HOTS was challenging to apply to students. During English lessons, the teacher only gave games to introduce English to the students. Students only wanted to learn English by playing games, because according to the students, learning English was very difficult and tedious. The teacher once gave exercises to students and used the HOTS technique, but the students have difficulties understanding the learning. When the students were given questions that needed HOTS, students asked the teacher the meaning of the problem and asked the purpose of the problem. The teacher concluded that the students found some trouble when given activities or exercises that contained HOTS. However, sometimes, the teacher also provided exercises based on HOTS to know more challenging activities. The teacher could find out how far the students possess the abilities. In this school, the students only get English lessons from grade 4 until grade 6.

To gather more information, the researcher also sought information from another public elementary school in Buleleng. The researcher interviewed one of the English teachers at the school on July 28, 2020. The English teacher was not a homeroom teacher, and the initial is BR. It means that the teacher only taught English and did not teach other subjects. In this school, English teachers got training. So, the teachers know about HOTS and how to apply it to students.

Furthermore, at this school, students study English from grade 1 to grade 6. From grade 1 to grade 3, the teacher gave an introduction to English. In introducing English lessons, the teacher provided vocabularies in English. The goal is to make the students know the meaning of the words. In grade 4 to grade

6, the teacher provided related materials from C1, C2, C3, C4, C5, to C6. The teacher also gave exercises related to the learning material given. When the teacher gave HOTS-based questions, students could work on them. However, there were times when the students confused about the material given; then the teacher was giving some help, which will make them understand the meaning of the questions is. The students can understand and work on HOTS questions given by the teacher because he/she has given English exercises to students from grade 1. In grades 4 to 6, the teachers introduce and train the students to think at higher levels.

After conducting interviews with teachers in Buleleng Regency, the researcher then analyzed the worksheet used during the lesson. In this worksheet, the researcher found many practice questions and pictures of the book attractive to students. However, the researcher only found question exercises that did not hone students' higher-order thinking skills in the book. Researchers only found LOTS practice questions. In addition, some pictures of practice questions are less attractive, so that students are not interested in learning English. Besides that, the practice of some of the questions contained in the worksheets' monotonous. This results in not being interested in learning and less honing students' higher-order thinking skills.

From these two different sources, it can be concluded that not all elementary school in Buleleng has implemented HOTS strategies. Significant differences can be seen from teachers' knowledge about HOTS and the provision of English lessons in HOTS-based classes. From the information obtained, it can

be inferred that before the teacher gives an explanation and activities related to HOTS, the teacher must know and understand overall about HOTS.

There are many ways for teachers to know and understand HOTS. For example, by joining training given by the government and related schools and reading information about HOTS. If the teacher already understands HOTS, the teacher will design suitable HOTS-based activities for the students. After that, the teacher can explain and give examples to students. After students understand HOTS explanations and examples, the teacher can provide HOTS-based questions to students. HOTS-based questions are helpful so that students understand higher-order thinking skills. In addition, with the information collected, it can be assumed that teachers must be given more training about HOTS and how to develop learning activities that include HOTS in it.

Many factors can influence students' HOTS. It can come from students or from teachers who provide HOTS-based learning development. Seman et al. (2017) found that students' success or failure is greatly influenced by how teachers conduct HOTS-based learning. The teacher needs to assigned HOTS-based learning activities by Bloom Taxonomy. After that, the teacher can assess students' abilities through HOTS assessment. However, before giving HOTS-based learning activities, the teacher should know and understand HOTS well. Then, the teacher can determine the method or strategy which will be used. Singh et al. (2019) argued that teachers lack knowledge and understanding about HOTS. To solve this problem, the teacher should find information about HOTS from various sources and join training or seminar about HOTS. The teacher will have more insight into HOTS and implement HOTS-based activities in the teaching

and learning process through the training or seminar. According to Widiawati et al. (2018), giving problems at the beginning of the lesson can be one of the techniques to improve students' HOTS. If this ability is continuously trained, students will have good HOTS.

The teacher needs to develop HOTS-based questions. The aim is to assess students' ability to do high-order thinking Tyas et al., (2019). The teacher can assess students' HOTS through questions such as multiple choice and description. According to Verdina et al. (2018), student worksheets can improve students' high-order thinking skills. From this assessment, the teacher can also see activities or strategies that must be improved and changed. HOTS-based learning activities can give many benefits for students. One of them is encouraging the students to do discussion, which can improve the quality of the learning. If the quality of students learning is good, the quality of human resources also will be improved.

1.2 Problem Identification

Teachers have different ways of teaching. Before starting the lesson, teachers should prepare the materials and design the activities that will be assigned for the students. Designing learning makes students do not feel bored in doing the lesson. A problem often found in learning is that teachers cannot develop activities that can encourage the students to do HOTS. Many factors make teachers find difficulties in developing HOTS-based learning activities. Because of these problems, the researcher is interested in knowing more about developing HOTS-based activities. Therefore, this research can be helpful for teachers to know how to develop HOTS-based learning activities, especially for fourth-grade second-semester elementary school students.

In this study, the researcher gathered information from two elementary schools in Buleleng by interviewing two different English teachers. At school A, the teacher gave information that English was not a compulsory lesson and soon would be cut. In school A, there was no English teacher but homeroom teachers who also taught English. The teacher at school A said he relied on textbooks and syllabi if he taught an English lesson. English lesson is scheduled once a week for two lesson hours or about 70 minutes. When conducting the lesson, the teacher tended to provide more games to absorb the pupils in the knowledge of English. So, in school A, learning English using the HOTS-based method cannot be applied. In addition, the English teacher at school A did not understand HOTS-based English learning. It can be concluded that HOTS-based English learning is not implemented yet because not all teachers knew HOTS-based learning.

The researcher did not only look for one source of information, but the researcher continued to look for information at school B. School B is also located in Buleleng. In school B, there was an English teacher who specialized in teaching English. The teacher at school B informed that the English teachers at the school had received training about HOTS-based learning. The English teacher at school B could apply HOTS-based English learning to students. The teacher utilized the book given by the school and the syllabus for conducting the lesson. In school B, students received English lessons from grade 1 to grade 6. From grade 1 to grade 3, students were taught primary English material.

Meanwhile, in grade 4 to grade 6, the teacher provided material based on C4, C5, and C6. When the teacher provided HOTS-based material in grades 4 to 6, sometimes the teacher guided the students to work on questions to do the

HOTS-based learning. From the information obtained in school B, the researcher concluded that, in school B, HOTS-based English learning had been implemented.

1.3 Research Limitation

The limitation of the problem is focused on the grade four elementary school students in the second semester because the researcher considers that the learning activities in that grade are exciting, especially the HOTS-based learning activities. The researcher gets the basic competence from one of the teachers in Buleleng, Singaraja, who teaches English to fourth-grade students. The researcher researches two different elementary schools and interviews two teachers who teach English to fourth-grade students. The teachers are ready to be interviewed by the researcher and willing to provide data in the syllabus. The syllabus is used to be a reference in teaching and learning activities. The syllabus is described in some learning activities, from the learning activities in the syllabus and field data obtained by researchers in interviewing teachers. From the interviews, it can be concluded that the data in the field does not match the learning activities based on the syllabus. From that data, the researcher conducts research and makes a final product in the form of a HOTS-based learning development design for fourth-grade second-semester elementary school students.

1.4 Research Question

There is a research question that can be formulated based on the research background above as follows:

1. How to develop learning activities which are HOTS-based for fourthgrade second-semester elementary school students?

1.5 Research Objective

1.5.1 General Objectives

It is hoped that this research can show how to design and develop HOTS-based English learning offline, especially for grade four elementary school students in the second semester.

1.5.2 Specific Objectives

To know and test HOTS-based English learning quality in elementary school, especially in grade four elementary school in the second semester.

1.6 The Specification of the Product

The specification of the research product is formulated as follows:

- 1. The HOTS-based English learning activities for the grade four elementary school students in the second semester are designed to be used by the teacher in elementary school.
- 2. The second semester's HOTS-based English learning activities for the grade four elementary school students contain exciting and authentic learning activities.

1.7 Research Significance

1.7.1 Theoretical Significance

This study contributes to HOTS-based English learning activities for fourth-grade elementary school students in the second semester.

1.7.2 Practical Significance

1.7.2.1 For the Readers

This study is expected to give information for the reader about what HOTS is, theories developed, the reality in society, and how to design and develop HOTS-based English learning.

1.7.2.2 For the Teachers

This study expects teachers to learn more about HOTS, develop HOTS-based English learning activities, and apply it to students through questions to measure student competency.

1.7.2.3 For Indonesia Government

The government can use the results of this study as the government is even more active in providing training to teachers on HOTS so that teachers know, understand, and apply it to students.

1.7.2.4 For the Students

It is expected that the students have good skills, knowledge, and attitudes.

Also, it is expected that students can have a high level of thinking ability in solving problems.

1.8 Assumption and the Limitation of the Development

Textbooks and teaching materials are used to identify activity topics used for worksheets and design HOTS-based English learning activities, especially in grade four second semester elementary school.

- a. The product is designed and advanced in concern with the syllabus and the features of grade four elementary school students.
- b. The product is designed and developed only for grade four elementary school students in the second semester.

1.9 Definition and Key Term

To avoid misunderstanding, the key terms used in this research are explained as follows:

1.9.1 Conceptual Definition

Astutik et al. (2020) stated that in the 21st century, students should enhance and improve their high-order thinking skills or HOTS, even when they are in elementary school. It is because this period is where the students think critically in various fields. Indriyana and Kuswandono (2019) explained that the purpose of HOTS-based learning is to make the students analyze, evaluate, and create something based on the knowledge they get. Besides that, Husamah et al. (2018) argued that HOTS is helpful for students to generate the right decision through specific steps. By improving the quality of students' HOTS, human resources in Indonesia can be more qualified. According to Retnawati et al. (2018), Indonesian students' high order thinking skill is still low. However, in developing and improving HOTS, the teacher's role as students' guide and facilitator is essential.

Teachers must have extensive knowledge to provide HOTS activities for students (Masran & Esha, 2018). Not all activities can be given to students, and not all HOTS-based learning activities can be given to the students. Teaching strategies employed by teachers are very crucial in helping the students to develop HOTS. In addition, Kusuma et al. (2017) stated that teachers should also adjust the situation and condition in the classroom with the strategies used. The development of HOTS

assessment is also needed because assessment instruments for training HOTS are still lacking. Teachers use the assessment instrument to assess how capable the students in doing HOTS-based learning activities. Furthermore, Putra (2018) noted that HOTS-based learning activities could improve students' thinking levels, especially analyzing and evaluating. If students' HOTS is good, the quality of human resources will be improved.

1.9.2 Operational Definition

The 21st century is known for its technological advances and sophisticated information, particularly in education and knowledge. In Indonesia, the 2013 curriculum is the newest educational curriculum that has been established since 2013. This curriculum has been applied since 2013, and there are differences between the previous curricula, namely learning using C4, C5, and C6 (HOTS). In 21st century learning, students must further enhance learning based on HOTS (Astutik et al., 2020). The purpose is to make the students analyze, evaluate, and create something from their previously gained knowledge (Indriyana & Kuswandono, 2019). HOTS activities help the students to practice their thinking skills and encourage the students to think critically. Besides, HOTS is helpful for students to make the right decision using specific steps (Husamah et al., 2018). In this 21st century and technological advances, the learning process can be done anywhere and anytime. However, this technological advance can also bring adverse effects. For example, students become spoiled by technological advances if students misuse this technology.

Before teaching students using the HOTS-based method, the teacher needs extensive knowledge to provide HOTS activities (Masran & Esha, 2018). If the teacher does not develop a suitable teaching strategy, the learning process cannot run effectively, and the result obtained will not be optimal. HOTS of Indonesian students are still low. Not only students, but the teacher also has an essential role in the improvement of students' HOTS (Retnawati et al., 2018). Many factors can cause a low ability to do high-order thinking. It can be from teachers or students. The development of HOTS assessment instruments is also needed because assessment instruments for training HOTS are still lacking (Kusuma et al., 2017). In developing the instrument, the teacher should design HOTS-based English learning activities to understand the learning. HOTS-based learning activities can improve students' thinking levels, especially in analyzing and evaluating. If the HOTS of students is good, the quality of human resources will be improved (Putra, 2018).