CHAPTER I

INTRODUCTION

This chapter focuses on the research background, problem identification, scope of the research and research limitation, research questions, research objectives, and research significances.

1.1 Research Background

According to the Minister of Education, Culture, Research, and Technology of Indonesia, currently Indonesia uses Kurikulum Merdeka as a learning curriculum. The Kurikulum Merdeka is a curriculum developed by the Minister of Education and Culture as part of the *Merdeka Belajar* program to increase learning quality. Teachers are given the flexibility to plan classroom learning with the goal to allow students to think independently and freely while using this curriculum. One of the ways to implementing the freedom and flexibility in learning is by choosing appropriate learning approach. Learning approach that is appropriate is differentiated instruction. Differentiated instruction is about increasing activities in the classroom so that students have more different options for collecting knowledge, making sense of ideas, and communicating what they learn (Tomlinson, 2017). In other words, a differentiated classroom gives various methods for getting knowledge, processing or making sense of concepts, and developing products to ensure that each student may learn effectively. Kurikulum Merdeka also allows teachers to decide what is the best for students based on their level of ability and interests (Lestari et al., 2022). It makes learning carried out flexibly. Kurikulum Merdeka itself provides a notion that allows the school to interpret the curriculum's

basic competences as part of an internal assessment (Ningrum et al., 2023). Learning focuses on the needs of students, where each student has a different way of learning, so differentiated instruction is able to maximize the potential possessed by students through adjusting student needs (Moss et al., 2005). The implementation of differentiated instruction starts with conducting cognitive and non-cognitive assessments to determine students' interests and students' needs in learning (Damayanti et al., 2023). It is important to carry out initial assessments to help teachers meet students' varied learning needs (Sutrisno & Hernawan, 2023). Differentiated instruction makes students to be able to choose a way of learning that suits the character of each student. There are three aspects in differentiated instruction, such as content, process, and product (Tomlinson, 2017). The first aspect is content aspect that is related to the topic or material that the students learned in the class. Second aspect is process aspect that is related to the students' learning style to process the information or material obtained. Third aspect is product aspect that is related to the assessment or results that represent students' understanding during the learning process.

Along with the rapid development of technology, education in Indonesia is not spared from the use of technology in it. Educational technology is a learning activity that uses technology in the process of analyzing, developing, and evaluating for the purpose of improving learning (Al-Haj, 2020). Technology in EFL (English as a Foreign Language) is able to become a container for audio, visual, and audiovisual media that facilitates the learning process (Anantiwi, 2021). EFL itself is a program that help people above sixteen years old to improve their English. Technological advances are able to create flexible learning according to its portion

(Shyamlee & Phil, 2012). Technology also makes it easier for students to find information and ideas during the learning process. Implementing technology in EFL helps students to develop their critical thinking and cognitive processes (Muryaningsih et al., 2023). Technology in EFL has been widely used during the learning process although in its implementation there are still many teachers who are not too proficient in using technology (Bello Nawaila et al., 2020). The use of technology in EFL plays a role in facilitating English acceptance and building student confidence during English learning (Bolibekova et al., 2020).

Learning in today's era is synonymous with the use of technology in implementing content, process, and product as aspects of differentiated instruction. The use of technology in EFL is currently making the application of the differentiated instruction becomes better, where content, process, and product are more accessible. Technology based Differentiated Instruction provides teachers to focused on the learning needs of students (Desinguraj et al., 2021). In the learning process that applies technology based on differentiated instruction in EFL is inserted freely both in aspects of content, process, and product, based on the students' need. Technology in EFL is facilitate the adaptation of the learning process to education demanded in the 21st century (Rakhimboevna et al., 2022). By implementing technology based differentiated instruction in EFL, students' learning creativity increase because the students have many opportunities to explore learning methods and learning resources that suit students' need, ability, and interest.

Technology-based differentiated instruction is also able to attract students' learning interest better than learning without technology (Martín-Blas & Serrano-Fernández,

2009). Thus, technology has an important role in the development of the learning process that leads to positive development. Students' interest was provided by the role of technology in EFL when implementing the Kurikulum Merdeka (Sri et al., 2020). Therefore, English learning that uses technology in it makes learning more relevant to the life of the modern era faced by students (Valerie Shu-Yuan Fan, 2016). Interest also related to comfort and needs (Iqmaulia & Usman, 2019). The application of technology based differentiated instruction in EFL is able to increase students' learning achievement during the teaching and learning process of English class (Lestari, 2020). Students' interest increased when stimulant and enjoyment is provided in the classroom and it was seen based on the four aspects of students' interest such as feeling good, attention, attraction, and involvement (Ainia, 2020). This pleasure affects students' interest in learning, especially in learning English. The existence of students' interest, the focus of students on a learning process was increase (Slameto, 2010). Interest in learning is also defined as the desire to engage in cognitive activity in the learning process (Klassen & Klassen, 2014). Students' interest in learning greatly influences the desire of students to be happily involved in a cognitive activity.

Based on the preliminary observation that conducted by the researcher with the tenth-grade of senior high school students at SMA Negeri 3 Singaraja, the researcher found that learning in the classroom has been implemented technology based differentiated instruction. SMA Negeri 3 Singaraja is a senior high school that is located in Singaraja. The researcher chose SMA Negeri 3 Singaraja as the place of this research because SMA Negeri 3 Singaraja has implemented technology based differentiated instruction in English learning in the classroom in

the aspect of content, process, and product based on learning profile, readiness, and interest of students in the classroom.

From the implementation, it seems that some students are interested in the application of technology-based differentiated instruction which is shown to be happy to be involved in English learning. However, it was also seen that some students were less interested in implementing technology-based differentiated instruction, where students showed an indifferent attitude and opened up to other things outside of the lesson. Then, the English teacher said that the effectiveness of English learning in the classroom increased after the teacher tried to facilitate students all over the aspects of content, process, and product that were differentiated and free according to the student's ability. It is in line with the study that was developed by Tomlinson (2017) that stated differentiated instruction is a learning approach that makes students to be able to choose the way of learning based on the student's need. This is also shown in research conducted by Desinguraj et al., (2021) which states that the implementation of differentiated learning makes learning more effective and flexible. Technology based differentiated instruction is able to increase students' interest because of the different content, process, and product provided to students through various technologies.

1.2 Problem Identification

Current learning in Indonesia applies the *Kurikulum Merdeka*. The existence of this curriculum makes learning more flexible where student differences such as learning profile, interests, and readiness are accepted in the classroom during the learning process. With the diversity of students, it is necessary to implement differentiated instruction which is able to differentiate students based on

three aspects, such as content, process, and product. The learning method using differentiated instruction may already be familiar to the teachers in carrying out the teaching and learning process in the classroom. One criteria of the implementation of differentiated instruction is students' interest, so the interest of the students must be seen. Technology-based differentiated instruction is a learning approach that has been applied in SMA Negeri 3 Singaraja in order to help students in the teaching and learning process also increase their interest in learning English. The application of technology-based differentiated instruction may assist to solve the problem of students' diversity specifically to the students who know their needs in learning English. In order to increase students' interest in learning while enhancing their use of technology, English teachers integrate the implementation of technology-based differentiated instruction. It shows that the differentiated instruction approach has been adopted by the 10th grade English teachers and the 10th grade of students, especially XB, XD, XE at SMA Negeri 3 Singaraja.

1.3 Scope of the Research and Research Limitation

The scope of this study is the implementation of technology based Differentiated Instruction at SMA Negeri 3 Singaraja, a Senior High School in Buleleng. A teacher and students, specifically XB, XD, and XE in SMA Negeri 3 Singaraja were chosen because the technology-based differentiated instruction is implemented in these classes. Also, the researcher concerned with the students' interest in learning that uses this approach.

1.4 Research Questions

Based on the research background that described above, two questions were formulated:

- 1) How was technology based differentiated instruction implemented by teachers in English learning at SMA Negeri 3 Singaraja?
- 2) How were students' interest when technology based differentiated instruction implemented in English learning at SMA Negeri 3 Singaraja

1.5 Research Objectives

Based on the research background, problem identification, research limitation, and research questions that described, the purposes of this research are:

- 1) To observe the implementation of technology based differentiated instruction by teachers in English learning at SMA Negeri 3 Singaraja.
- 2) To investigate the students' interest when technology based differentiated instruction implemented in English learning at SMA Negeri 3 Singaraja

1.6 Research Significances

The results of this study are expected to give a positive impact in both of theoretical and practical significances:

1.6.1 Theoretical Significant

The results of this study are important for the theory of differentiated instruction because they provide information on how the teacher at SMA Negeri 3 Singaraja used technology based Differentiated Instruction based on the content, process, and product aspect to teach the students and how this may have affected the students' interest.

1.6.2 Practical Significant

a. Teacher

The results of the study are intended to improve teacher knowledge, particularly with the use of technology based Differentiated Instruction in senior high schools.

b. Students

The results of this study are supposed to reveal information about the students' interests when technology based Differentiated Instruction implemented.

c. Other researchers

The results of this study can be used to guide the other researcher when carrying out a comparable study in a different area, to increase the reliability of the findings.