CHAPTER I

INTRODUCTION

1.1 Background of Research

The trend of interest in developing microlearning has greatly increased in recent years, especially in the 21st century. Microlearning has initially been proposed to address the traditional learning that drives cognitive overload and stress due to the overwhelming volume of course materials that decrease motivation and confidence to engage in learning (Kossen & Ooi, 2021). Moreover, Díaz Redondo et al. (2021) stated that the existence of microlearning is due to the decreasing in human capacity to stay focused on a single item, distraction and inattention, and especially in learning. This is in line with Katherine (2007) that revealed internet users only pay eight consecutive seconds of continuous attention when surfing the Internet.

While 21st century education, or what is also known as the industrial revolution, expects students to be prepared to adapt and have a dynamic mindset (Winanti et al., 2019); create new technologies and have ways of work such as creativity, problem-solving, and collaboration (Silva et al., 2021); and create new products and services (Makarova et al., 2018). It is vital to build learning spaces that allow students to conduct research, solve problems, collaborate with others, and evaluate their actions in order for them to develop these skills and abilities (Angrisani et al., 2018). The traditional learning is less effective to grasp these skills, so the implementation of microlearning seems urgent.

Microlearning as an educational technique referred to *as micro- or bite-sized content, microcourses*, or *just-enough* information has been presented in

various studies due to it importance to be implemented in many fields. Microlearning has shown to improve health professions students' knowledge and confidence in completing procedures, retaining knowledge, researching, and participating in collaborative learning (Gagne et al., 2019). It has also promoted self-directed learning in which students' preference of learning are supported. It is in line with the statement from Peters (2004) that microlearning is based on the concept of creating little chunks of learning information and adaptable technologies that allow learners to access them more easily at specified times and situations throughout the day, such as during time breaks or while on the go. In addition, microlearning is designed to help learners acquire a skill or solve a problem within a short time period (Zhang & West, 2020). Arnab et al. (2021) has proved that microlearning improve both engagement and learning outcomes. Mohammed et al. (2018) suggested that microlearning method can improve student's learning ability for up to 18% compared to traditional method and to develop different skills of students. Microlearning are frequently used to train workers in a company and it showed that employees are more confident to make the task done after the training (Hesse et al., 2019). Microlearning allows students learn mathematics and improve communication skills and develop autonomously (Mateus-Nieves; Moreno, 2021). A research for dairy personnel training showed 78% of employees felt more confident in correct task completion after the training (Hesse et al., 2019). Using micro learning through Web 2.0 tools achieved effectiveness (according to Black equation) in developing students' skills of multimedia designing and production (Abu Sarah, 2021).

Numerous studies have also been conducted on the application of microlearning in the study of languages. Hosseini et al. (2020) conducted a research on the use of flipped learning for Iranian EFL learners to enhance self-regulation and the result showed that the growth of their autonomy and self-regulated learning was facilitated by their increased awareness of the learning process itself, active participation in the learning process in the classroom, enjoyment of learning, and increased involvement in the learning process. Almazova et al. (2018) highlighted the important elements of the main features of microlearning technology; the methodologies and tools used in micro-learning when teaching English to non-linguistic master students; and the systematic resources developed and the evaluation of the outcomes. Widiantarai (2017) developed English materials for vocational students integrated with e-learning that focused on students' need analysis, the design of the e-learning based English materials, and measuring the quality of the e-learning based English materials. Through content analysis, Ayu et al. (2022) described the processes of designing and formulating Learning Object Materials of English materials for senior high school. Lastly, Fedorova et al. (2022) describe the idea of micro-learning as a modern educational technique and point out its primary tools for helping students improve their English language skills. The researches drives to the conclusion that microlearning is on the trend and to be more potential to be implemented in numerous fields.

However, teaching nowadays is more challenging due to several factors such as incompetent teachers that could not adjust to the current trends as the students is in different generation which is generation Z (Gen-Z) or iGeneration that born after 2000. The natural characteristic of Gen-Zers is digital natives, fast

decision-makers and highly connected or simply said difficult to perform without internet and smartphones (Demir & Sonmez, 2021). This phenomenon is happening in all layers of life including in the classroom. Researchers and stakeholders must consider the phenomenon to be further discussed because the difference with the previous generation in personality traits, expectations, learning preferences, needs and interests. Therefore, Ferrari in Demir & Sonmez (2021) suggested that a comprehensive examination of formal education, and settings, particularly instruction, and instructors, is necessary to meet the new and varied expectations placed on this most recent group of learners. Being the main language in the era of information, English as a foreign language instruction is not an exception as well.

English reading is one of the important aspects in this discussion. It is somehow irrelevant to the current trend since the learning audience is Gen-Zers, the reading materials is outdated and out synced. Teaching reading used to be in a traditional format with long passage and the reading instruction has been tainted by issues that make students uninterested. Consequently, students do not absorb enough knowledge and skills trough reading, and teachers failed to develop reading materials. Gen-Zers tend to be exposed to the internet extensively, so they prefer watching videos and short materials over the long printed materials like book (Jaleniauskiene & Juceviciene, 2015), utilizing video-based learning, incorporating intrapersonal learning into class and group, offering community engagement opportunities to address societal needs (Seemiller & Grace in Demir & Sonmez, 2021); incorporating online and electronic study materials, making use of mobile applications in and out of the classroom (Cilliers in Demir & Sonmez, 2021). Therefore, proper English reading materials should be developed in order to

maximize learning outcomes. According to Khalidiyah (2015), by providing the students with engaging reading material and motivating them to read more, the teachers can help the students develop their reading comprehension skills.

Several studies have developed English reading materials for students. Prayoga et al. (2021) developed English learning materials for students of computer network engineering of Vocational High School (VHS) at peripheral city of Indonesia. Risangsukmo (2015) developed appropriate reading learning materials for Year XI students of Computer Engineering and Networking department of SMKN 1 Sedayu. Astawa et al. (2017) developed communicative language tests for vocational high school students. Arimbawa et al. (2013) developed ICT-based reading materials for grade eight students of Junior High School at SMPN 1 Kubutambahan which met the criteria of good reading materials. Lestari & Priyana (2020) modified the methodology created by Jolly and Bolitho to create suitable learning resources for reading and writing English utilizing research and development. Then, Sitorus et al. (2018) created English reading materials for class X students in the program for computer and network engineering competence at SMK Taman Siswa Medan using a scientific approach. Last but not least, Margana & Widyantoro (2017) created an English textbook for Yogyakarta's Vocational High School (SMK) students that emphasized developing higher-order thinking skills (HOTS).

Despite this early observation, the development of English reading materials are still lacking from cross-curricula competence, one of them is critical thinking skills and has not covered vocational music program. While Handayani (2018) stated that whether reading for pleasure or for academic purposes, the use of critical

reading to encourage students' critical thinking and reading comprehension. In addition, critical thinking is crucial for vocational students in order to be able to solve problem and make decision. This is inline with Skorikov & Vondracek, 2012; Turner & Lapan, 2013 as cited in Keijzer et al. (2022) that having a strong sense of one's vocational identity helps people make wise career decisions, deal with work-related stress, set reasonable expectations, develop positive work attitudes, explore and plan their careers, and more. Thus, the integration of critical thinking skills in reading materials is necessary to encourage the ability of problem solving and decision making.

Due to some studies did not discussed microlearning and critical thinking skills in English reading materials, the researcher facilitated the gap in this research by developing English reading materials integrated with microlearning-based as well as critical thinking skills. Therefore, in order to address the needs of vocational music students in grade X, this research aims to examine the existing English reading materials, analyse the procedure of materials development, and eventually design English reading materials based on microlearning and critical thinking skills. This research is organized into five chapters, beginning with the introduction in the first chapter, which includes the research background, problems, purposes, scope of research, and significance. The literature review in Chapter 2, which discusses the theory that underpins this research. The methodology in chapter 3 covered the technique, time and location, data, data source, and data gathering procedures. The findings and discussion are presented in Chapter 4 and the conclusion in chapter 5 which includes summary of the research and recommendations.

1.2 Problems of Research

Based on the background, three research questions have been formulated to guide the research accomplishment:

1. To what extend have the existing English reading material design for vocational school students been accommodating the microlearning principles and critical thinking skills development characteristics?

2. How is the procedure of microlearning-based and critical thinking skills integrated with English reading materials for vocational school students majoring in music?

3. How is the design of microlearning-based and critical thinking skills integrated with English reading materials for vocational school students majoring in music?

4. How is the readability of microlearning-based and critical thinking skills integrated with English reading materials for vocational school students majoring in music?

1.3 Purposes of Research

According to the problems of research, the purposes of research could be outlined as follows;

1. To explore and select the microlearning principles and critical thinking skills development characteristics in the existing English reading material design for vocational school students.

2. To describe the procedures in designing microlearning-based and critical thinking skills integrated with English reading materials for vocational school students majoring in music.

3. To design microlearning-based and critical thinking skills integrated with English reading materials for vocational school students majoring in music.

4. To find out the readability of microlearning-based and critical thinking skills integrated with English reading materials for vocational school students majoring in music.

1.4 Scope of Research

The scope of this study focused on designing microlearning-based and critical thinking skills integrated with English reading materials for vocational school students majoring in music in the tenth grade. The researcher employed Design and Development Research (DDR) with the steps of analysis, design, evaluation, and revision that proposed by Richey and Klein. The analysis of existing English reading materials determined whether or not critical thinking skills and microlearning were present using several questions from the frameworks. Then, a chronological procedure is expected to be presented in order that teachers can use continuously as a guideline to develop microlearning-based and critical thinking skills infused in English reading materials more effectively since it is appropriate for the learner's needs. Furthermore, the concept of microlearning-based and critical thinking skills infused in English reading materials is designed in the form of various learning object materials (LOM) before it is examined by the users and experts.

1.5 Significances of Research

This research allowed us to expand our understanding of microlearning and critical thinking skills significantly. This research is expected to make contributions to both theoretical and practical aspects of education on

microlearning-based and critical thinking abilities integrated with English reading materials for vocational school students majoring in music in grade X.

1. Theoretically – The research provides microlearning design principles and critical thinking skills indicators that infused in English reading materials for vocational school students majoring in music of tenth grade. The literature in this study can be adopted and modified by other researchers who are interested in studying microlearning, critical thinking skill, and English reading for vocational music schools. In addition, they can also develop similar learning object materials in the future using the provided guideline. Lastly, they can also evaluate this research in order to validate the employability in other vocational programs.

2. Practically – Students have the opportunity to explore various activities using interesting English reading materials that designed based on their needs. Additionally, the relevant materials with the 21st-century education are undoubtedly presented, which can be successfully improve their critical thinking skills. Meanwhile, teachers are also the main gainers of this research due to the existence of English reading materials that have been infused with microlearning-based and critical thinking skills. Since teachers play role as coaches and facilitators of inquiry and reflection, it is also helpful in providing them with references and information regarding how to design English reading materials for vocational school of music.