

CHAPTER I

INTRODUCTION

1.1 Background of The Study

The use of microlearning-based models has been studied extensively in recent years. Microlearning was firstly mentioned in 1963 found in an economy book by Hector Correa and it also started to eLearning in the mid-1990s. In 2012, Microlearning is thought to be a new method of learning that uses bite-sized stages and brief informational units on portable devices with small screens. (Giurgiu, 2017). Learners who use the small screen of portable technology (e.g. smartphones, laptop or tablets) to learn anytime and anywhere in an informal way, such as while waiting in line for coffee or riding the bus, benefit from mobile microlearning (Grant, 2019 as cited in Mei Lee, *et.al*, 2021). Additionally, microlearning, which has short duration activities and plays a significant role for the characteristics of the native digital learners, provides complex knowledge in fragments or bite-size "nuggets" of information and has been applied as a novel intervention to improve an individual's self-care capabilities. (Wang. *et.al*, 2020; Hug, 2010; Zhang & West, 2019). A study found that microlearning is regarded as an effective complement to traditional learning in terms of information technologies (Fedorova., *et.al*, 2022).

It is generally accepted that microlearning allows students to more readily absorb and remember information offered by more manageable and digestible course modules and exercises. Because the entire educational process is divided in small chunks that usually take no longer than a few minutes, microlearning education is often referred to as "bite-sized Hence, microlearning is considered as the solution of the challenges that the digital native learners have. Additionally, one emerging paradigm made feasible by technology is microlearning, which is essentially characterized as the delivery of learning sessions or activities of shorter duration than traditional instruction delivery (Hug, 2010).

Allela (2021) argued that one of the microlearning objective materials that can be used on a variety of platforms, including desktops, laptops, computers, tablets, and smartphones are interactive parallax-based scrolling is short-HTML. It is a markup language that is employed to create the electronic texts (referred to as pages) seen on the Internet. There are several linkages, or links to other pages, on each page. A single HTML version was used to construct each web page that was seen (Computer Hope, 2021). HTML is the fundamental step in generating a website page, followed by JavaScript, SCC, etc. (Robbins, 2012). The effects of web and mobile-based applications on university students were examined by Samudra and Setyadi in 2019. They found that web- and mobile-based English instruction improved students' understanding of scientific papers and the conclusions they contained.

Further, Yusof and Saadon (2012) investigated how web-based language learning affected students' English skills. Students were given a pre-test and a post-test to compare traditional face-to-face learning techniques, web-based learning methods, and integrative (traditional and web-based) learning management in the study. They concluded that the integrative learning approach is the most successful way in the teaching processes of students as a result of their tests. Additionally, observations by Irzawati and Hasibuan (2019) suggested that it was inferred that there was a significant difference between the students who were taught by using a website platform in the writing achievement and those who were not. A term of web-based which is used for language learning is WBLL (Web-Based Language Learning). It is understood as language learning conducted on the web using web material and resources (Son, 2007 as cited in Yuliana, 2022). Previous studies found that using educational materials from the web-based learning more interesting for students. Moreover, it is simple to use and access, interactive, formal and informal learning, boosting

students' academic and extracurricular performances, exposing global issues, defining for the beginner level, containing the vocabulary spelling and pronunciation, and evaluating via online which suitable for the digital native learners (Nguyen & Kulm, 2005; Chi, Lewis & Reimann, 1989; Suriaman, Tahir & Usman, 2019).

At the forefront of language teaching is the development of materials. The most vital toolkit for language educators and students to use is one that includes materials. According to Richards (1998), the instructional materials serve as the foundation for the linguistic input and practice that students receive in the classroom. The ability of the resources to inspire students' enthusiasm and interest in learning is therefore vital. Noam Chomsky, who asserted that the primary goal of instruction is to pique pupils' interest in the topics being presented, thus supports this claim (as cited in Wang & Hao, 2017). One of the essential components of teaching English is the learning material. Due to the vital roles that learning materials play in the context of global growth, it is crucial that they be updated to reflect the most recent trends and learner demands. The exercises should give students opportunities to participate, practice, and receive feedback on particular results. Identifying strategies to check on understanding, and build in time for explanation, discussion or to reflect on learning are considered.

Additionally, to pursue the students to be 21st century skilled-citizens, critical thinking which belongs to the 21st century skill, has gained prominence in the field of education in recent years (Telebinejad & Matou, 2012). Critical thinking is no longer regarded as a luxury; rather, it is generally perceived as a fundamental ability needed to survive in modern society (Hashemi & Ghanizadeh, 2012; Ku, 2009; Lun et al., 2010 as cited in Dabbagh, 2015). These are in line that critical thinking skills are significant for designing learning

material. A study conducted by Bobkina and Stefanova (2016) focused on the readers' response to a literary work by applying critical thinking skills. However, finding English learning materials, particularly activities or exercises that are pertinent to teachers' and students' requirements with the critical thinking skills infused as the cross curricular competence, is still a challenge According to The Cambridge Life Competencies Framework (2020), students need to be able to think critically, which is a higher level of thinking, in order to be able to think clearly and intelligently about what they want to accomplish and what they believe is the best course of action. According to Ryan (2022), humans' beliefs and methods of thinking are influenced by the capacity of life, the choices taken, and the filters through which it is seen and understood.

However, this view is challenged by recent data showing that the use of website- based language learning has been rising in many aspects of life, especially in education (Pratama, 2018). There are only few researches related to the use of websites presenting exercises in second language learning since not many teachers have implemented this kind of learning in the classroom, due to the lack of facilities, conditions and environment. Moreover, little research investigated the use of short websites for a longer time which is not suitable for the 21st century generation, not in the form of microlearning, which commonly implemented 2-15 minutes (Allela, 2021; De Gagne, 2019) for each material. It is desirable to carry out surveys using microlearning-based websites for English learning materials of eighth graders. As a result, this study aims to design web-based English microlearning materials infused with critical thinking skills for eighth graders.

1.2 The Research Questions

To point the main research objective, the sub-research problems as the followings:

1. To what extent are the existing English learning materials for eighth graders integrated with microlearning infused with critical thinking skills?
2. How are the processes of designing web-based English microlearning materials infused with critical thinking skills for eighth graders?
3. How is the designing web-based English microlearning materials infused with critical thinking skills for eighth graders developed?
4. How is the validity and employability of web-based English microlearning materials infused with critical thinking skills for eighth graders?

1.3 The Research Objectives

According to the problems identified above, it can be stated that the main objective of this study is to design web-based English microlearning materials infused with critical thinking infused for eighth graders. These following are the sub objectives:

1. To analyze how far the existing English learning materials for eighth graders integrated with microlearning infused with critical thinking skills,
2. To describe the procedure of designing web-based English microlearning materials infused with critical thinking skills for eighth graders,
3. To develop web-based English microlearning materials infused with critical thinking skills for eighth graders, and
4. To find the validity and employability of web-based English microlearning materials infused with critical thinking skills for eighth graders.

1.4 The Research Scope

The scope of this study is to design web-based English microlearning materials infused with critical thinking skills for eighth graders. Every unit will change the existing English materials that will be modified to add questions that demonstrate the application of microlearning and critical thinking skills. The ADDIE design will be conducted as framework in this study.

1.5 The Research Significance

Hopefully, this study will provide beneficial findings both for the English language teaching and the learning process. Then, it also will be significant both in theoretical and practical.

1. Theoretically

In theoretical significance, the English teachers who especially teach the eighth graders will be provided with the philosophy and background theories of web-based English microlearning materials infused with critical thinking skills.

2. Practically

The findings hopefully can contribute to the education field, especially for the teachers, researchers, students and also the institutions. Firstly, for the teachers, this study can be an inspiration for the English teachers who will develop and design English microlearning materials. Therefore, the students will be able to reach the learning objectives well. Additionally, this study can be conducted further by the other researchers for future research. Finally, the institution can conduct this study to improve their quality and standard.

1.6 The Research Key Terms

To prevent misunderstanding, the key terms used in this study have operational definitions as follows:

1. **Microlearning** refers to a new learning model which is known as a bite-sized or small-sized model due to the length of time.
2. **Web-based Microlearning Materials** refers to any sources of learning which is designed based on the microlearning concept used as learning material in the form of website. It is particularly used in English language learning.
3. **Critical Thinking Skills** refers to intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating data gleaned from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.
4. **Eighth Graders** refers to the middle school second year students who are commonly 14-15 years old teenagers.