

# CHAPTER I

## INTRODUCTION

The first chapter provides general outlines of the research that include the background of the study, research questions, purposes of the study, scope of the research, significance of the study, key terms and state of the art.

### 1.1 Background of the Study

Recently, the most significant matters in the learning process obtain information about what has been learned and what has not is known after experiencing learning. One way is used by teacher to assess their students that they learned something from the lesson the students' knowledge and variety of skills through the assessment process. The process of assessing student achievement is an important process in increasing the quality of learning and education (OECD, 2008). Teachers use the assessment instruments to collect the assessment's data related to student achievement.

Generally, one skill of the assessment instruments is reading assessment instruments that can be used by teachers as a learning tool or learning strategy in reading. According to Colorincolorado, (2017), the assessment instruments in reading guide the teachers to monitor the ongoing progress of their students regularly, particularly by providing a comprehensive understanding of individual's skills, abilities, and processes. Therefore, teachers can assess students' knowledge and reading skills by assessment activities, such as word recognition and reading comprehension to measure the students' ability and performance in understanding reading texts, to determine the reading comprehension level of students, and to improve the student's capability to comprehend reading text.

The assessment instruments of reading skills are considered as the relevant assessment activities which are developed to support the assessment method and be measured quantitatively and qualitatively, or by giving numerical values such as ranks and letter grades, or by offering written descriptions, oral feedback, and narrative reports. Pinter (2006) reveals the assessment instruments are essential for effective teaching and learning to analyze and to determine the results of student's

learning that has completed over a period of time in the classroom learning and teaching environments. In this case, teachers have to conduct the assessment instrument to get evidence about progress and performance of students' reading skill. They can discuss, observe, and review the students' work during interactions with the lesson being assessed.

Therefore, the assessment instrument in reading is commonly supposed to see how the students are going in their learning, explore the own understanding and express their critical thinking in classroom. According to Gough & Tunmer (1986) in Mellard (2010) that actually reading comprehension is the result of decoding skill and standard language comprehension capability which are assessed properly. In general, reading assessment has used in schools' examination and be designed to evoke and explore students' understandings of texts and language usage, hence they must have exceptionally high reading abilities. The assessing reading comprehension needs greater time, effort, and complexity. The teachers should be able to utilize an accurate and appropriate reading assessment instrument as an evaluation of existing class data. Teachers usually apply the appropriate procedures based on the text or dialogue was read by students orally to assess the student achievement after reading a text or a dialogue.

Furthermore, the involvement of microlearning and critical thinking are well known considered to play a major role in improving reading assessment activities. The use of microlearning as learning strategy has been current trend of 21st century toward instructional design with the emergence of new media. It has been a huge impact on students in different levels of the society in the fragmented learning and development education. Microlearning is known as a suitable teaching strategy can change the ways of students to learn the materials by using technologies than previous generation. Reinhardt and Elwood (2019) reveal the possibility of using microlearning and personal learning environments to promote a growth mindset in students. They found that microlearning allows students to be positioned in flexible ways that can be integrated into daily activities that support individual learning goals. It can be proved that the way of microlearning to create the short learning activities in the era of digitalization and rapid media development

based on small pieces of knowledge, brief videos, short podcasts, etc. Hereby, the students prefer reading short texts rather than skipping or scrolling long texts.

Microlearning is also believed as a learning method which is dependent on motivation for self-learning. According to Ogange and Mishra (2021), the student's lack of motivation could affect how well the microlearning lessons are received. Even, Zhang and West (2020) also state microlearning is a form of e-learning that focuses on providing skill-based and just-in-time knowledge in small quantities. This can provide benefits, especially in the context of post-pandemic learning, namely online learning and blended learning, considering that student learning activities are not limited by time and place. Students can learn anytime and anywhere with relatively small learning units in a short time. It is ever conveyed by Arnab, et al. & Zhou (2021) that the microlearning method directs students to acquire knowledge and information at their own pace, which encourages independent learning and increases student autonomy. Due to, microlearning helps to achieve the goal of English teaching, which is to develop students' overall English skills as well as their ability to learn independently.

Related to the reading assessment instruments, the using of microlearning will be flexibility in terms of time, place, and material to place students as center and subject. Students are encouraged to develop a relationship with the text and reconstruct their knowledge. Designing microlearning for English reading assessments should align with students' capacity to comprehend paragraphs, contexts, and core ideologies at the deep cognitive level.

Meanwhile, infusing critical thinking skills in reading assessment activities is also part of the most important 21st century skills as well as microlearning strategy. The Indonesian government tends to view critical thinking skills must be taught and learned in schools or universities. Teachers and students who have high abilities need to think rationally, critically, logically, and creatively. Based on the issue of Decree Number 17 of 2010 and in the 2013 school curriculum regarding the Indonesian Education System and its implementation indicate that "Intellectual skills include the ability to master technology, science and/or art related to the field of study, think critically and creatively, and conduct research with a scientific approach".

Indeed, the use of critical thinking skills in reading assessment activities is able to improve students' reading comprehension and give attention to the needs of students. These skills are needed to foster the development of both affective aspects in reading behavior and cognitive aspects in interpreting texts. Students can criticize each text they read and become more critical learners. Karadeniz (2015) ever argues that through reading-related activities, students can build critical thinking skills, get new and different perspectives, comprehend a better understanding of themselves and the world, and analyze the events and situations which they have in the classroom.

However, these views are challenged by recent data that show several weaknesses in reading assessment activities. Kartikaningsih (2016) found Indonesian students who faced argumentative texts for class assignments often lack critical thinking because they were unfamiliar with the concept of critical thinking and how to apply it to their literacy skills (Junining, 2016; Gustine, 2013). The problems have ever happened in a case when the reading ability of Indonesian students was ranked 74th out of 79th participating countries throughout the world in the reading test released by the OECD in 2019. This case demonstrated that the reading ability of Indonesian students is classified as very low. Despite, students seemed confused or nervous when they have to read critically in English. Kozyreva, et al. (2021) suggest students require critical reading to learn the misinformation, algorithmic bias, and persuasive argumentation.

Unfortunately, not all students have ability in reading proficiency that is a target of teaching English reading in curriculum. There are still many gaps in the learning process of reading assessment instruments and underlie reasons why this issue has emerged. Benesch (1999) asserts that EFL students are stigmatized as ineffective readers and lacking the ability to express critical thinking. It shows the students have less critical thinking skills in reading and discussion during certain learning periods. This is caused lack of sufficient knowledge or language proficiency to accomplish any reading assignment. The students seldom learn to read and criticize any controversial issues which cause them to worry about their mistakes, especially in grammar and meaning.

Another gap is caused by cultural issues (Fell & Lukianova, 2015) that critical thinking is incompatible with the cultural values of Second Language learners. This occurs in most classrooms in Indonesia where teachers do not vary learning model in teaching process to students. Unfortunately, the teaching process is focussed on the teacher-centered, focused on form, reproduction of ideas, textbook oriented, memorizing, and fact-based orientations in the classroom. And finally, students are not well-equipped with critical thinking skills in reading classes.

Next, it is also affected by vocabulary limitation. When the students have a limited vocabulary, they will face difficulties to identify the meaning of unfamiliar words, to understand the contain in reading text and to obtain the knowledge of reading materials. And last gap is a pronunciation. The majority of readers believe pronunciation figure out how to pronounce the words being read in the text. Students often experience confusion and lack confidence to pronounce the words in a phrase. Due to, these activities of reading subject can create a feeling of boredom and disinterest in studying and interpreting the text, so that students have a poor understanding of their reading skill.

Based on the gaps regarding the involvement of microlearning and the infusion of critical thinking, several previous studies have been conducted to outline the importance of implementing microlearning and critical thinking skills in English language learning and assessment instruments. Rachmadi, R.I, (2021) conducted the research to design ways of thinking skills integrated writing assessment for English language education study program. Their research used design and development research (DDR) method. As the result, the designing ways of thinking skills assessment instruments for writing subjects should be done in line with the program semester plan development, since ways of thinking skills to be integrated in the writing assessment model.

Furthermore, Herdian, et al. (2023) analyzed the infusing microlearning and critical thinking skills in writing English learning material for tenth graders. This study employed a content analysis approach to analyze the learning materials from Kurikulum Merdeka Belajar as additional learning materials which are developed by teachers. The result of study showed that the microlearning features in each unit

are not satisfied and critical thinking skills are found in writing English learning materials. Due to, the study suggested to improve the students' writing English learning, writers' books and teachers' teaching by emphasizing microlearning aspects and critical thinking skills more in teaching and learning materials.

Another study is Junining (2014), who conducts the research refer to designing critical thinking skills-based instruction for EFL reading. This study implements three routine practices such as internalizing, applying and evaluating to integrate EFL reading with critical thinking skills. It also connects the theoretical and practical implementation of these routine practices to apply the pedagogical implementation of critical thinking skills in reading classroom.

On the other hand, Yongying Zhou (2021) presents the research on the teaching principles of English reading on the microlearning platform. This study is purposed on the characteristics and principles of the teaching design of English reading on the microlearning platform. On the microlearning platform, the teachers give full play to optimize the effect of reading teaching. Finally, English reading teaching process can implement the principles of autonomy, integrity, interest, and cooperation.

And further research, Rizki, E. N. (2016) presents the research on designing CEFR for languages based English reading assessment. It used DDR methodology and data sources from reading assessment, and CEFR assessment from existing syllabuses from several universities. The result of research shows the average of universities in Indonesia requires the students to master the topic about education, film, book and literature, news, lifestyles and current affairs, media, and arts.

However, based on the previous researches above, it has not yet been revealed in detail whether the integrating microlearning and infusing critical thinking skills of reading assessment instruments are beneficial to enhance students' activeness and engage them in English reading comprehension. The target audience for this research is generation Z that involve the tenth graders in senior high school. The researcher focusses on reading assessment activities to improve students' reading proficiency which are not ideal yet recently. The reading assessments activities for students are chosen to be applied in classroom. Solikhah (2018) agrees in reading class, the learning and teaching process do not provide students with

sufficient information and skills, and teachers do not effectively help students to improve their reading abilities.

Consequently, the researcher is interested in conducting recent study with the title “Designing Microlearning-Based and Critical Thinking-Infused English Reading Assessment Instruments for Tenth Graders”. The purpose of the present study is to explore the existing reading assessment instruments in reading materials from Kurikulum Merdeka and Kurikulum 2013, review the procedures of designing them, and eventually to design a microlearning-based English reading assessment instruments from existing textbooks with the infusion of critical thinking skills that expected to meet the need of tenth graders in senior high school and be effective to increase the students proficiency level of their reading comprehension. Additionally, the researcher will use the CEFR (Common European Framework of Reference for Language) to design English reading assessment instruments in order to reach an international standard for language acquisition.

## **1.2 Research Questions**

Based on the background of the study, this study focusses on the following research questions

1. To what extent have microlearning indicators and critical thinking skills indicators been addressed in the existing English reading assessment instruments for 10<sup>th</sup> graders?
2. How are the processes of designing English reading assessment instruments for 10<sup>th</sup> graders based on the microlearning indicators and infused by critical thinking skills?
3. How is the design of the microlearning-based and critical thinking skills infused English reading assessment instruments for 10<sup>th</sup> graders?

## **1.3 Purposes of Study**

In accordance with the research questions, the purposes of this study are as follows

1. To reveal the microlearning indicators and critical thinking skills indicators that have been addressed in the existing reading assessment instruments for 10<sup>th</sup> graders.

2. To present the processes of designing English reading assessment instruments based on the microlearning indicators and infused with critical thinking skills for 10<sup>th</sup> graders.
3. To present the prototype design of English reading assessment instruments based on the microlearning indicators and infused with critical thinking skills for 10<sup>th</sup> graders.

#### **1.4 Scope of the Study**

This study will focus on designing English reading assessment instruments for 10<sup>th</sup> graders based on the microlearning indicators and infused by critical thinking skills in the level of CEFR B1. Moreover, the existing English reading assessment, and the instruments of reading assessment instruments in each unit are included and followed by questions to figure out the infusion of critical thinking skills in the English reading materials. This study utilizes the method of Research and Development study (R&D) by adapting Jolly & Bolitho's model (2011). In implementing R & D method, five stages will be conducted in using Jolly & Bolitho's model that include need analysis, design, development, evaluation and revision, and final product of the reading assessment instruments.

#### **1.5 Significance of the Study**

The study of microlearning and critical thinking skills is highly expected to improve the quality of teaching and learning process significantly. The reading assessment instruments as sources for teachers can carry out the process of teaching and learning activities. The significance of the study is classified into two parts, namely theoretically and practically which can give contribution to the educational profession.

- 1) Theoretically, it enriches information and give a deeper understanding how to design English reading assessment instruments based on microlearning and critical thinking-infused for tenth graders. Furthermore, the result of this study can be used as a reference and guideline for the future researchers who are interest to study new research on microlearning and critical thinking skills.

2) Practically, the significances of this study are expected to contribute for students, English teachers, other researchers and institutions. For students, it is expected that the designing microlearning-based English reading assessment instruments will help the students to get experiences and increase critical thinking skills in English reading comprehension. This study can also be useful for improving their reading skills in order they have in-depth English language skills both in studying English courses and in facing the world of work.

Meanwhile, for English teacher, the designing reading assessment instruments based on microlearning indicators and critical thinking skills indicators are aimed at helping the teacher to build more relevant and appropriate materials to be used in teaching of students in tenth grade of Senior High School. Hopefully, this material can meet the needs of their students.

For other researchers who focus on Research and Development design, this study will encourage them to conduct relevant studies in different settings. Furthermore, the result of study can be used as guidance by institution to improve the quality of education that focus on students' target and learning needs.

### **1.6 State of the Arts**

Recently, a number of studies have intended to show the benefits in detail and explore the applications of microlearning in language learning, even they have been published. Microlearning is an innovative strategy in the 21<sup>st</sup> century digital learning to be presented in small units and learning activities is designed in smaller contents to students, due to they can choose what and when they learn. The application of microlearning can be elaborated with critical thinking skill. The critical thinking skills is conducted into any subject including English reading skill to improve students' reading comprehension and give attention to the needs of students.

Therefore, this research is mainly examined about the design and development research of integrating microlearning and infusing critical thinking skills into English reading assessment for tenth graders. A model of microlearning-based English reading assessment instruments enable teacher to enhance the qualities of teaching and learning with the infusion of critical thinking skills and

contribute students' activeness in English reading comprehension. The target audience for this research involves the tenth graders in senior high school and effectively help teachers to improve students' reading abilities. It can be inferred the application of microlearning in English reading assessment as a short-term learning strategy and integrating critical thinking in assessment to increase student interest and achieve learning goals in e-learning.

However, the characteristics of generation Z at this moment indicate they cannot focus on learning for a long period that cause easy bored and need something instant and multitasking, especially in comprehension of reading material correctly. Students consider reading comprehension as the difficult skill for learning where the students have the lack of proficiency in reading. The gaps are supposed to design English reading assessment with a focus on microlearning and critical thinking skills. Due to, there has been a lot of research to design English reading assessments but this research is closed to focus on microlearning and critical thinking skills.

As a result, the goal of the current study is to measure the reading comprehension level of students. They are also aimed to improve the student's capability to comprehend reading text. The assessment instrument in reading is supposed to see how the students are going in their learning, explore the own understanding and express their critical thinking in classroom.

Finally, this research is conducted to present the processes of designing them, and the prototype design by conducting microlearning concepts and infusing critical thinking approach. Additionally, this research also concerns the CEFR level to design the assessment instruments.

## **1.7 Clarification of Key Terms**

The key terms are used in this research to explain the outline of their definitions briefly that related by focusing on the research as follows

### **1.7.1. Microlearning**

Microlearning is frequently defined as small units of concentrated and condensed learning activities. The activities should only take a few minutes and can be done on a variety of digitalization and technology devices. In this research, microlearning is also known as bite-sized learning which can be effective and

efficient for students at anytime and anywhere. It also be used to learn larger and more complex material by breaking it down into smaller modules, or for smaller and more informal training.

### **1.7.2 Critical Thinking Skills**

Critical thinking skills are described as the ability to clarify thoughts in order to analyze a problem or information, apply the interpretation, and evaluate the right choice or judgment. According to Scriven, M. & Paul, R. (2003) that critical thinking is an intellectual process that involves actively and thoroughly understanding, applying, analyzing, synthesizing, and evaluating information and judgments collected through experimentation, communication, reasoning, reflection, and observation as a guide to beliefs and actions. It also means being able to advocate ideas and opinions, present them logically, and make decisions for improvement.

### **1.7.3 Reading Materials**

Reading materials are some components that are arranged for the reading subject. It is written materials and contains of information and knowledge that is intended to be read. The material is found in book, composition, report, etc. It is a kind of things to be used teacher and students in reading class, so they can learn and master the material for a subject. According to Wolley (2011:15), reading comprehension is the process of deriving meaning from text. The goal is to get a complete understanding of what is described in the text rather than getting meaning from individual words or sentences. It describes the meaning of text and comprehends the understanding of words or sentences in the text.

### **1.7.4 Assessment Instruments**

In this research, the term of assessment instruments involves the measurement of skills and knowledge gained over a period of time and is referred to as summative or achievement testing. The tests utilize tasks or questions that reflect the material taught in class and the skills practiced. These instruments involve students to use their knowledge and performance effectively and creatively. The assessment instrument consists of activities which are designed to support the assessment process and used to collect evidence of student competency.

### **1.7.5 CEFR (Common European Framework of Reference for Languages)**

The Common European Framework of Reference for Languages (CEFR) is an international standard for describing language proficiency. It describes language skill on a six-point scale, beginning with A1 for beginners and progressing to C2 for those who have mastered the language. As a language learner or a member of a profession involved in language teaching and assessment, the use of the Common European Framework makes easier for anyone to be involved in language learning, teaching, and assessment, such as teachers or learners and to assess the level of different qualifications. CEFR is contributed to the implementation of the Council of Europe's language education principles, which include encouraging reflective learning and learner autonomy.

### **1.7.6 Tenth Graders**

The term of tenth grader is someone who is beginning the first or second year of Senior High school in a public institution. In this stage of education, students in tenth grade are usually between the ages of 15 and 16.

