

CHAPTER I

INTRODUCTION

A. Research Background

One of the fundamental English language skills that we need in this fast-paced world is reading. It enables individuals to master the language effectively, efficiently and in order to comprehend the contents of certain topics. Sari (2016) stated that to find information about word in a text is the act of reading. However, as individuals have different set of priorities they want to learn, many of them have difficulty in improving their reading comprehension.

Reading is a process of constructing meanings of words, a skill that leads a person to interact and gain meaning from written language. Reading comprehension is the ability to read, process and understand the meaning of certain text. The importance of reading is also a part of language diversity as Allah explained in the Qur'an surah Ar-Rum, verse 22:

وَمِنْ آيَاتِهِ خَلْقَ السَّمَوَاتِ وَالْأَرْضِ وَاخْتِلَافِ أَلْسِنَتِكُمْ وَالْوَأْنِكُمْ إِنِّي فِي

ذَلِكَ لَآيَاتٍ لِلْعَالَمِينَ

To learn a language is the first thing a person should do in order to know and understand how society works. In this case, reading comprehension and its strategy to improve the skill is important to build

further understanding of a language, allowing a person to deep dive into English and find meaning behind the language used.

Reading skills play an important role in our daily life. Students who attend class daily may find themselves in a situation where they are asked about their knowledge about certain topics that require them to read some text or answer according to their pre-existing knowledge about the said topic to the teacher. Whether or not they are able to draw conclusions, ask questions or argue about the text depends on their level of reading comprehension. Students who have mastered the reading skills of skimming, scanning, intensive and extensive reading may find the main idea of the text, key points and draw conclusions faster than those who have not.

Reading skills such as skimming and scanning are also important not only for students to skim and scan through a text. It is an important set of skills to master regardless of the individual's purpose. Reading is essential in order to for individuals to pursue their goals. It helps a student to answer a simple question from a friend or from their teacher. It helps an office worker to point out important things in a meeting. Therefore, it is important to cultivate reading comprehension and reading skills throughout one's life.

Another important reason to cultivate reading comprehension and reading skills regardless of the purpose of the individuals is how the English language affected the different domains from education to the business sectors. English is often the 'money language' because how it is able to connect people from different parts of the world and how it is an important,

essentially irremovable tool to strive for a better future makes English the language to use in many industries. Furthermore, English language alone can affect an individual's career prospect. It is often a fundamental requirement in order to qualify for a job.

With English language as a knowledge, the value of individuals who master it will become higher and language is essentially a tool to make an individual respected among others. This is one of the reasons why humans seek knowledge in the first place. In educational field, language proficiency translates to higher level of understanding of the learning materials which also translates to desirable grades. Ultimately, language can be used as the tool for academic purposes, business, industry that leads to personal growth.

Technological advancements have made its way into our life and changed the way we communicate. In this case, the field of Artificial Intelligence in Education (AIEd) can enhance the English language skills, specifically reading by using its approaches in applications and websites. Language and technology are inherently intertwined. The creation of all technological achievements would have required a great deal of language. This could occur by consumers interacting directly with the technology to guide it to carry out its purpose, or through researchers, scientists, and engineers collaborating to bring a concept to reality. The relationship between language and technology is unbreakable because wherever we find technology, we will also find language.

One of the technological advancements that is able to affect educational field is artificial intelligence. Artificial Intelligence or AI as stated by Kathikeyan (2022) is a set of capabilities of robots to carry out tasks that usually require human intelligence, it includes visual generation, speech recognition, translation, and decision making. The application of Artificial Intelligence (AI) in education can improve language learners' English language proficiency. According to Dewi (2021), students' English language proficiency can be improved by using AI-based tools, including apps, websites, and virtual reality.

In education, reading can be a challenging task as there are several difficulties that may arise, some of them are the inability to generate ideas, inability to understand the task itself, lack of motivation and interest in the topics. In order to bridge the gap, students can use various AI-based tools to help them generate reading materials to improve their reading comprehension. Learners who are not able to generate ideas by themselves or unable to understand certain task can use artificial intelligence-based tools do most simple and complex tasks depending on the tools they are using. Whether it is to generate ideas or answer a question, artificial intelligence-powered tools can assist learners in their study.

Artificial Intelligence-based tools have several important advantages. First of all, AI-based tools can provide fast, concise, and accurate results according to the users' needs and with the pronunciation, read aloud, text-to-speech and a lot of other assistant-type features students

are able to learn by themselves even when they face some problems in the process.

Second, AI-based tools can learn and recommend reading topics as it is able to analyze users' search prompts or history of usage. This can help students to be able to learn more vocabularies and topics in their reading. In addition, this day and age is perfect for students to start improving their English reading comprehension by using smartphones which are widely available. Students are able to improve their English language proficiency, especially reading skill anywhere and anytime.

Thus, Artificial Intelligence has the potential to help improve reading comprehension and assist reading process efficiently and effectively. This research aims to analyze several AI-based tools that can help in English language reading comprehension and assist in the reading process. The research also aims to bridge the gap in the explorations of AI-based tools to help improve reading comprehension and assist reading process, especially for students.

B. Definition of Key Terms

1. Artificial Intelligence

Artificial Intelligence refers to the ability of a machine that is programmed to imitate the thought-process and actions of human being. It enables machine to think and act like a human being through models and algorithms. In this research and particular topic, artificial intelligence can be understood as a tool that can be used to assist the

teaching and learning process, specifically reading process. The ability to imitate the thought-process here is translated for convenience of the users, in this case artificial intelligence is used to translate, paraphrase, and summarize in order to create a better reading process environment.

2. Artificial Intelligence-powered Tools

The tools in this case are several things that are powered by Artificial Intelligence, it can be in a form of application or websites that exists to provide information about certain topics, translate texts, read aloud, paraphrase and to facilitate communications. In this research, the tools are used to translate, summarize or paraphrase certain text to help readers in their reading process.

3. Reading Process

Reading process is the activity that employs the ability to read, process and understand the meaning of certain text. Reading process relies on being able to read words and being able to understand the meaning of the words and sentences, it consists of pre-reading, during reading and after reading. Good reading process leads to good reading comprehension is important for the sake of reading that is to engage with and learn from a text.

Ultimately, reading process leads to whatever the reader wants, an enjoyable, meaningful and engaging activity. Reading process is important for students to improve since they learn from written material

almost all the time, it helps them understand the topic better and they will have a better way of expressing their opinions of said topics.

C. Research Questions

In this section the researcher would like to propose research question as follows, what are the Artificial Intelligence-based tools that can be used on reading process?

D. Research Objectives

To bridge the gap found in the research question, therefore the researcher would like to describe the Artificial Intelligence-based tools that can be used on reading process.

E. Research Significance

Theoretically, this research provides several benefits for teachers and students. In practice, teachers can use AI-based tools to help in their teaching and learning process to be more effective and efficient. This research also benefits learners who want to improve their English reading comprehension and assist them in their reading process with AI-based tools. For future researchers, this research is expected to be used as reference for them to explore in the field of artificial intelligence for educational purposes.

This study also offers benefit for the people in the field of education such as:

1. English Language Learners

The artificial intelligence-powered tools studied in this research can be used by English language learners to improve their proficiency and help with reading process.

2. English Language Teachers

With the technological advancement, the results of this research are expected to help teachers to create an innovative teaching environment through the use of artificial intelligence-powered tools. Teachers can also provide better learning experience by using the online websites and applications to assist their teaching and learning process.

3. Language and Technology-related Researchers

This study is expected to be a reference for future researchers who want to conduct a study in the field of language and technology, especially about the use artificial intelligence in the field of education.