CHAPTER I

INTRODUCTION

This chapter presents the background of the study, formulation of research problem, objective of the study, significance of the research, scope and limitation of the study, and definition of key terms.

A. Background of the Research

Artificial intelligence (AI) is defined as computer programs which capable of carrying out human-like functions, like learning, adapting, synthesizing, self-correcting, and utilizing data for complex processing (Kerr, 2017).

Due to its advantages, artificial intelligence (AI) is becoming more and more significant in today's society. The needs of many different industries today, including industry, healthcare, finance, agriculture, transportation, the environment, and entertainment, are supported by artificial intelligence. Since a lot of contemporary fields of study and expression rely more and more on computational resources, a consensus is already developing for a unified framework that includes complexity theory, learning analytics, machine learning, educational data mining, and artificial intelligence (Dawson et al., 2018; Tsai et al., 2019).

People can learn with the aid of education helpers like bots because of the existence of AI technologies. In order to improve education quality,

the educational system must keep up with technological advancements. This is especially true when it comes to information and communication technologies. Artificial Intelligence has made it possible to provide the digital learning content that is being developed today. These days, thick textbooks can be condensed into shorter, more easily readable and comprehended sections for students, including study guides, topic summaries, or brief notes. AI as the Industrial Revolution's cornerstone to support the technology-mediated learning process, 4.0 is essential. Artificial intelligence is thought to enhance human learning and assist individuals in more successfully achieving their educational goals. Thus, it should come as no surprise that a lot of AI-based technologies and breakthroughs are being and will be used to enhance learning in order to make it more useful and efficient (Fitria, 2021).

Research conducted by Hariyanto S, Rudi H, Sri Wuli F, and Abdurrahman F (2018) revealed that AI has brought both benefits and challenges to the study and teaching of English. The environment for teaching English in higher education has altered because to AI. Different AI systems were used by English professors for a variety of tasks, such as questioning and answering, proofreading, checking for plagiarism, paraphrasing, and reviewing literature. The study also showed that artificial intelligence (AI) offers many benefits for teaching and learning languages, including the ability to identify plagiarism and grammatical mistakes. Furthermore, AI has brought up both potential and difficulties for the

teaching of English in the future. Digital literacy was needed to use AI.

English instructors need to constantly advance their digital literacy because

AI may eventually replace them in the teaching profession.

In the research conducted by Chyntia Heru and Nia Pujiawati (2019) found out that AI can help the students to improve their ability in writing English text. However, students also need to be equipped with natural intelligence related to grammar, transitional phrases, word choice, and spelling.

The next research conducted at the Islamic University of Kalimantan by Sri lestari, Wahyuningsih Usadiati, and Misrita (2021) was to investigate the correlation between students' artificial intelligence and their English reading skills achievement in the second semester class of the English Study Program. The study aimed to understand how artificial intelligence influences students' ability to improve their English reading skills. The study conducted at the Islamic University of Kalimantan in the second semester of the English education study program discovered a substantial association between students' artificial intelligence and their attainment of English reading skills.

The study was conducted by Alkhawaldeh & Khasawneh and published in October 2023 of the Journal of Southwest Jiaotong University. The study's main goal was to demonstrate a connection between foreign language learners' speaking and writing skills and regular usage of AI tools.

The study aimed to investigate the impact of artificial intelligence on enhancing foreign language skills, specifically in speaking and writing. The study found that the regular usage of artificial intelligence tools significantly improved foreign language writing skills, increased confidence in writing, and offered various options to advance writing skills in a foreign language. The data from the study participants indicated positive views on the importance of AI tools in enhancing writing skills in foreign language learning.

Syahira, Kartini, Sulistyahadi and Sigit Prafiadi in 2023 also conducted a research which showed that the use of Artificial Intelligence (AI) in learning is quite assist students in improving their ability to write English text. This language service is able to provide feedback on the quality of their writing in just a few seconds. In a matter of seconds, thus the results of this research can contribute to students' understanding of the use of AI in learning activities in English language learning activities.

Research conducted by Klaudia T. Bochniarz, Stanislaaw K. Czerwinski, Artur Sawicky, Pawel A. Atroszko in 2022 studied about the attitudes to artificial intelligence among high school students. This study showed that people are more distrustful of Artificial intelligence when it is perceived as more hostile and less governed by emotions.

The next research conducted by Latifa Alzahrani (2023) explored the variables influencing students' attitudes and behaviors toward the application of AI in higher education. The findings of this study demonstrated that, although students' attitudes were adversely affected by perceived risk, performance expectancy and enabling conditions had a major impact on students' attitudes and their behavioral intention to employ AI in the classroom.

The research conducted by Ahmad Syauqi Harsyah in 2023 investigated the students' literacy and attitude in writing thesis. The result showed that the students had a high literacy and positive attitude in the use of artificial intelligence in writing thesis.

Reviewing the studies by challenge abroad and in Indonesia, researchers found some of the same results from the journals that have been reviewed, including that there are positive and negative attitudes of the use of AI in general. However, from some previous journals, it is known that they examined student attitudes in general and have not examined how students perceive AI in a particular aspect. The researcher also notices that there is limited study which examine about the literacy and attitude level of students towards AI. Therefore, from the weaknesses that have been found in previous studies, researchers find suggestions for these weaknesses, namely in further research it is necessary to conduct research with a wider sample and also examine aspects of the students' attitudes, literacy level towards AI in academic writing. This research is important to do in order that it can determine the level of literacy of students towards the use of artificial intelligence in academic writing so that this research can be used as a reference for students so that they can know their level of literacy and

in order to increase their awareness of the use of artificial intelligence then improve their understanding towards AI. This study also aims to find out how students perceive the use of AI in academic writing. That way it can help both students and lecturers to be wiser in using AI for academic writing.

B. Formulation of Research Problem

- 1. What is the English students' attitudes level towards the use of Artificial Intelligence in academic writing?
- 2. What is the English students' literacy level towards the use of Artificial Intelligence in academic writing?

C. Objectives of the Study

The objective of this study are:

- To find out the literacy level of English students towards the use of Artificial Intelligence in helping them write academic writing.
- To investigate the attitude of English students study program using AI in academic writing.

D. Significance of the Research

The researcher hopes that by carrying out this study, the information pertaining to educational expertise in the field of English language instruction would be strengthened. Thus, the researcher believes that readers will find this research to be helpful both conceptually and practically. It also makes it clear that since English department students are enrolled in university courses, they must become proficient in technology. It facilitates their future use of the media with ease.

E. Scope and Limitation

Based on the background of the study. The researcher limits the present study to English students who have used AI to write academic writing. This study's purpose is to know the students' attitudes and literacy level towards the use of Artificial intelligence in academic writing.

F. Definition of Key Term

1. Attitudes

According to Allport (1935), an attitude is a state of readiness, either mental or neurological, that has been shaped by experience and influences or is dynamically influenced by how a person responds to all pertinent things and circumstances. A simpler approach to describe attitude is as a mindset or a tendence to act in a particular way according to an individual's personality and life experiences. In this research, attitude here is how individual responds positively, negatively, or neutrally depending on their perceptions. An individual or group of people's attitudes, views, and perceptions concerning particular occurrences that they would like to be informed about can be measured using the Likert Scale. According to the viewpoint above, the Likert scale can be used to determine the degree to which the variables to be assessed will have an influence and can serve as a foundation for organizing instrument items into questions (Sugiyono, 2017). The respondents is given this scale to help determine their response. For each

statement, each respondent indicates whether they strongly agree, agree, disagree, or strongly disagree.

2. Literacy

According to Kirsch and Junglebut, literacy defines as one's ability in using information to developing knowledge that leads to benefiting communities. In this context, literacy refers to the ability to employ artificial intelligence.

3. Artificial Intelligence

Through the use of artificial intelligence (AI), machines are now able to reason and learn much like people. According to Fitria (2021), this technology has the potential to simplify the complex human experience.

The term artificial intelligence in the content of this research is Artificial intelligence that used as writing tool for helping students in academic writing.