CHAPTER I INTRODUCTION

The content of this chapter are background of study, limitation of study, the problem of study, objective of study and the significance of study.

1.1 Backrgound of Study

The rapid advancement of technology today has brought progress in various aspects of life. In the field of education, technology is increasingly being utilized, especially in language learning, both by teachers and students to improve the teaching and learning process. Along with the development of technology, artificial intelligence (AI) has made a significant impact in the world of education, which has the potential to greatly support students in their language learning journey. Artificial intelligence-based technology is a popular modern trend in language classrooms, especially in writing classes (Ginting & Fithriani, 2022).

AI is a system that has the same intelligence as humans and is characterized by the ability to learn, adapt, solve problems, make decisions, and understand human language. With support from AI, teachers and students can gain new learning and teaching experiences such as assessment, tutoring, content creation, and feedback (Kurniati & Fithriani, 2022). In an effort to develop the skills needed by students in the 21st century, AI chatbots can be used in education in Indonesia (Setiawan & Luthfiyani, 2023). The integration of these technologies in education has the potential to transform traditional learning methods and provide innovative approaches that meet individual learning needs. Therefore, AI is increasingly being used by teachers and students to improve the teaching and learning process.

One AI-based technology that has attracted a lot of attention to date is the Chat Generative Pre-trained Transformer, also known as ChatGPT. ChatGPT is an AI technology that can help humans interact through text-based conversations, or chatbots. This machine has the ability to use natural language processing (NLP) technology that can answer human questions in the form of text (called prompts) typed in the application (Setiawan & Luthfiyani, 2023). ChatGPT can be accessed through the website or by downloading on playstore or appstore.

		ChatGPT		
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	Examples	Capabilities	Limitations	
	"Explain quantum computing in simple terms" →	Remembers what user said earlier in the conversation	May occasionally generate incorrect information	
	"Got any creative ideas for a 10 year old's birthday?" →	Allows user to provide follow-up corrections	May occasionally produce harmful instructions or biased content	
	"How do I make an HTTP request in Javascript?" \rightarrow	Trained to decline inappropriate requests	Limited knowledge of world and events after 2021	
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Figure 1. Logo and Interface ChatGPT

In learning English, writing is one of the English skills that students must master. Students are expected to be able to communicate in English both orally and in writing. In writing, we need to know a lot of vocabulary, word arrangement, grammar mastery, and paragraph mastery. However, mastering writing skill is not easy, writing is always considered a challenging skill to learn. There are many factors that make EFL students find writing challenging. According to Fadda, (2012) writing style, motivation, excessive expression of anxiety, writer's block, and other emotional factors may have an impact on EFL learners' ability to write in English. In addition, EFL students' literacy background and experience in their mother tongue are also very important in the development of their academic writing. Furthermore, a study conducted by Utami Dewi in an EFL writing class, most students experienced difficulties in expressing their ideas in English. Several factors affect students' EFL writing skills, such as students' lack of ability to translate words in context, common vocabulary, lack of approaches, strategies, and techniques used by teachers and students low motivation (Dewi, 2021).

Since writing is a complex skill that poses difficulties, to overcome these problems, ChatGPT has the potential to be an innovative AI-assisted writing tool that supports the development of students in writing. ChatGPT system can understand human language making it very easy to write creatively with the same quality as human work (Mairisiska & Qadariah, 2023). ChatGPT can generate feedback on writing, even suggesting ways to improve writing. In addition, it can explain grammar rules or give examples of how to use certain words or phrases, help with concept ideas, paraphrase, and translate language. Students get suggestions and corrections as they write so they can learn their mistakes and correct them immediately.

Such is the case at the University of Michigan, which has developed an AI writing tutor called M-Write that uses ChatGPT to give students feedback on their writing. M-Write provides students with writing prompts, feedback on their writing, and revision suggestions. More on using AI-powered writing assistants such as Grammarly and Hemingway Editor. These tools use ChatGPT to analyze student writing and provide improvement suggestions, such as correcting grammar and punctuation errors and suggesting sentence structure changes.

The research conducted by Waruddin who examined the ChatGPT tool to analyze student writing and provide improvement suggestions, such as correcting grammar and punctuation errors and suggesting sentence structure changes, brought significant benefits and improved performance in writing essays. Students can be creative in improving and developing their English skills, especially in writing (Wahyuddin et al., 2023). This certainly helps students who need additional support in writing. EFL students often feel anxious or afraid of making mistakes when writing in English. With ChatGPT, they can feel more comfortable and confident. With the benefits offered by ChatGPT, it is possible that its use also has an impact. The impact that students will experience when using chatGPT includes the risk of fostering laziness in learning, can hinder the improvement of abilities, and eliminate creativity in thinking. It because ChatGPT is easy to obtain information quickly, it can make students lazy to try, which in the end can make them dependent. Apart from that, the negative impact of using ChatGPT can also lead to cheating, dishonesty, and plagiarism, which reduces the originality of the work (Salmi & Setiyanti, 2023). Also, sometimes misinformation occurs. Although the programming is structured to mimic the human thought process, chatgpt will still never be able to fully replicate human intelligence.

Investigating students' perceptions on these technologies is crucial to understanding the impact. Therefore, this study aims to explore EFL students' perceptions of using AI ChatGPT as a writing tool. This research conducted in English language education at UIN North Sumatera. Based on observations in the English education department at UIN North Sumatera, it's known that almost all students are familiar with ChatGPT, and most students have started using ChatGPT. Although there are also students who are still not too familiar, and there are also students who show reluctance towards ChatGPT.

According to Irawati & Santaria, (2020) Research on perception is conducted to find out the responses and views of a person or group towards something. These perceptions can be used to evaluate and improve the learning process. In the context of this research, it can help in optimizing the use of AI such as ChatGPT as a tool in learning, especially in writing, so that it will improve students' writing skills. And teachers can adjust learning strategies based on students' perceptions so as to improve the effectiveness of English learning that is relevant to students' needs. In addition, by examining students' perceptions, it helps in recognizing the potential benefits and impacts of this AI in the context of writing. The insights gained from this study can help in understanding the implications of integrating ChatGPT into educational settings and guide the responsible and effective utilization of this technology. While there is a growing body of research on students' subjective experiences and views of AI technology in education, there is a dearth of studies that specifically address EFL students' perceptions of AI ChatGPT, especially as a writing tool. This study providing in-depth insights into how EFL students interact with and utilize ChatGPT to improve their writing skills.

1.2 Limitation of The Study

To avoid an undirected discussion that produces targets that are not as expected, the author must limit the various problems that the author examines which this limitation is also the scope of this research. Therefore, this research is focused on undergraduate students of the English education study program at the State Islamic University of North Sumatra (UINSU), with participation limited to students who actively use ChatGPT as a writing tool. In addition, this study is limited to the use of ChatGPT in an academic context, specifically in writing English. The main focus was given to EFL students' perceptions towards the use and experience of using ChatGPT in writing English.

1.3 The Problem of Study

From the above background, the author can then identify the problems to be studied by formulating the problems as follows: What are EFL students perceptions of the using of Artificial Intelligence (AI) ChatGPT as a writing tool?

1.4 The Objective of Study

Based on the problem formulation above, the researcher wants to examine EFL students' perceptions of using AI ChatGPT as a writing tool. The objectives of this study are as follows: To Investigate EFL students perceptions of the use of Artificial Intelligence (AI) ChatGPT as a writing tool.

1.5 Significance of the Study

The significance of research is the impact of achieving the research objectives. The significance in this study is as follows:

1. Theoretical Significance

This research is expected to make a positive contribution to science education, especially on EFL students' perceptions of the use of ChatGPT.

2. Practical Significance

The practical significance of this research is that it is expected to provide benefits for various parties both directly and indirectly, especially for:

- a. Students, gaining insight into students' perceptions of ChatGPT is very important because they are the main users and beneficiaries of this technology.
- b. Teachers, policy makers, and other researchers, the insights gained from this study will help in understanding the implications of integrating ChatGPT into the educational environment and guide the responsible and effective utilization of this technology.
- c. The researchers themselves, i.e. enriching the researchers' knowledge and experience in this research.

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