

CHAPTER I

INTRODUCTION

1.1 Research Background

In this modern world of education, there are latest technology innovations appear that has some features to help the student in accessing the learning material, one of technology innovation is ChatGPT, an AI language model developed by OpenAI. ChatGPT is an artificial intelligence (AI) chatbot that uses natural language processing to create human-like conversational dialogue. ChatGPT is a large language model-based chatbot developed by OpenAI and launched on November 30 2022. It is a natural language processing tool driven by AI technology that allows users to have human-like conversations and much more with the chatbot. As a still new technology, ChatGPT need to be explored its advantages and disadvantages that determine whether it is suitable for students to use.

ChatGPT has the feature namely natural language processing (NLP). With this feature, ChatGPT can create human-like conversational dialogue as it understands and generates text in a way that mimics human conversation. Deng (2022) stated ChatGPT has a powerful NLP feature that can generate human-like conversations; it has several benefits, such as enhance efficiency, improved accuracy, and cost savings. Based on this statement, ChatGPT has the advantages which can help enhance efficiency by automating conversations quickly, create more precise reactions since it is prepared on expansive dataset of discussions, permitting it to get it the setting of a discussion and produce fitting reactions, reduce costs for businesses that depend on customer service.

ChatGPT has the potential to be a learning tool for student that uses natural language processing (NLP) that it can make human-like conversational dialogue so student can ask and discuss together with ChatGPT by NLP feature. Xiao (2023) stated by Natural Language Process of ChatGPT can serve as a personal tutor, providing real-time feedback, personalized evaluations with students in making dialogue. To make dialogue with ChatGPT, it is important to provide clear and specific prompts that include information about the characters, their relationships, and the context of the conversation we can start your prompt by specifying the character or setting for which you need dialogue suggestions, and include relevant context and

the purpose or goal of the dialogue. Murgia (2023) stated prompts formulated using natural language—as in ChatGPT—can facilitate student seeking for and understanding information in an educational context.

Young & Shishido (2023) stated the generated content by ChatGPT showed a summarization process, making it easier for EFL readers. The readability scores of ChatGPT content indicated that it was more understandable for EFL readers compared to the original content. They showed that generated content by ChatGPT is understandable for English as a Foreign Language (EFL) learners in so it would have the good impact for their learning purpose.

The study on students' perceptions of ChatGPT conducted by Shoufan (2023) found that most students perceive ChatGPT as helpful for learning and as a complementary resource for studying. Additionally, some authors believe that AI-based applications such as ChatGPT can facilitate teaching and learning, helping students develop skills such as reading, writing, information analysis, critical thinking, and problem-solving. However, concerns were raised about the accuracy of ChatGPT's generated answers and its potential impact on academic integrity and learning. The study also highlighted that ChatGPT could be a potential threat to the integrity of online exams, particularly in tertiary education settings where such exams are becoming more prevalent.

The impact of ChatGPT in foreign language learning, it includes opportunities for authentic language use, personalized tutoring, and innovative teaching methods. ChatGPT can provide learners with oral conversational experiences similar to speaking with a native speaker, helping to improve pronunciation and phonology awareness. Additionally, ChatGPT can generate topics for discussion, creative writing prompts, and offer corrections and explanations in writing, enhancing language learning. Overall, ChatGPT offers benefits such as experiential learning, personal tutoring, and freeing teachers from heavy marking loads, ultimately improving teaching and learning effectiveness (Hong 2023).

Shin & Lee (2023) found that the quality of content generated by ChatGPT was lower compared to human experts. Participants in the study rated the content generated by ChatGPT as less plausible and less appropriate compared to the content generated by human experts. They find that the natural language processing result or the content shown by ChatGPT is not

acceptable, however the result of artificial intelligence never be better than human expert thought.

Meanwhile everything has the limitations such as ChatGPT in the form of limited capabilities and security concerns. Deng (2022) stated although ChatGPT is a powerful language generation tool, there is some certain limitations. One major limitation is that it is only able to generate text based on the input provided to it, and it does not have access to external information or the ability to browse the internet. The other one ChatGPT raises potential security concerns. One major concern is the risk of adversarial attacks, in which an attacker attempts to manipulate the model by providing malicious inputs that cause it to produce incorrect or undesirable outputs.

For preliminary research, after the researcher and some students of English Education of Jambi University try to use the feature of natural language processing (NLP) produced by ChatGPT, the researcher found something interesting from the feature of ChatGPT that NLP result has positive impact to understand the learning material in the way of making discussion and answering the question quickly. Ali (2023) found that faculty members at the University of Bisha generally have highly positive perceptions of the benefits that ChatGPT may provide to the English Department.

Open AI has the good purpose of creating ChatGPT as Rachbini (2023) found Open AI created ChatGPT to understand and respond to questions and topics in text form, with the primary goal of assisting users in a variety of situations. Users can ask questions, ask for advice, or ask for help in solving complex tasks like a virtual assistant. Meanwhile with the much benefit of ChatGPT claimed by Open AI as a creator of ChatGPT, there must be the weaknesses that make ChatGPT not recommended to use. In reality the user become too dependent with ChatGPT eventually ChatGPT disserve the user. Through this research, it is important to find out whether is ChatGPT deserve to use, therefore the researcher want to conduct the study of ChatGPT usage and its advantages and disadvantages to anticipate for the user whether is ChatGPT recommend to use.

Based on explanation above, as a still new technology of artificial intelligence, ChatGPT has positive and negative values. However, students' perceptions of ChatGPT have not yet been addressed in the foreign language learning especially in Jambi context, this

research aims to close this gap by addressing the advantages and disadvantages of ChatGPT as English Education Study Program students perceive and how they use ChatGPT.

1.2 Research Questions

Based on the background above, the problem of the research is formulated in the following questions

1. How do English Education Study Program students use ChatGPT?
2. What are the advantages and the disadvantages of using ChatGPT as perceived by English Education Study Program students?

1.3 Research Purposes

Based on the problem, the purpose of this research integrated as follows:

1. To find out how English Education Study Program students use ChatGPT.
2. To explore the advantages and disadvantages of ChatGPT as perceived by English Education Study Program students.

1.4 Limitation of The Research

This research is concerned on exploring ChatGPT usage among English Education Study Program students as well as the advantages and disadvantages of ChatGPT as perceived by them.

1.5 Significance of The Research

The results of this research are anticipated to offer significant contributions. For the researcher, it provides a comprehensive understanding of ChatGPT's usage in learning activities, deepening their knowledge in this area. For other researchers, the study's findings are expected to serve as a valuable reference, particularly for those conducting similar research on this topic. Additionally, for students, the research offers critical insights into the effectiveness and suitability of using ChatGPT for learning activities, helping them determine its value and applicability in their educational pursuits.