

# CHAPTER 1

## INTRODUCTION

In this chapter, the introduction of the study which consists of the background of the study, the research problem, the objective of the study, the assumption, scope and limitation, the significance of the study, and the definition of the key terms.

### **A. Background of the study**

In the digital era which is increasingly advanced and continues to develop, it cannot be denied that technology has a very important role in various aspects of life, especially in the education sector. With the existence of technology-based knowledge in the current era, the Minister of Education, Culture, Research, and Technology (Mendikbudristek) Nadiem Anwar Makarim has an important role in the quality of education and emphasizes the importance of the role of technology that is right on target in ensuring the running of educational services for Indonesian children. In the world of education, there has been a significant transformation in various aspects that can be achieved through the widespread integration of technology, this is due to the industrial revolution 4.0. In the field of education, this certainly has an influence, namely, innovation and the use of information are things that are highly focused on in education, the internet, and maximizing the use of technology (Oktavian & Aldya, 2020). With the rapid development of technology at this time, the potential that is the basis of learning resources is being used more, educators are not only the focal point, but also the basic orientation of learning resources that are much wider and make use of tools to

help find teaching materials widely and quickly. In these conditions, sophisticated technology in education has become a scientific discipline that is needed by teaching staff and students to be better prepared to face learning in the 21st century (Faiz & Kurniawaty, 2023).

Technology cannot be separated from the world of education, it has a high potential to enter education, because education must be integrated with students. At this time, AI has become a medium that can help students in their own learning by controlling and monitoring it, which can enable them to live and work well and independently in the future as quoted by one of the researchers, AI become one of the common platforms in 21st century learning, work and life (Schroeder, 2023), students also need to be equipped with the ability to be able to critically analyze products that have been published by AI and become “technologically literate in an environment that increasingly technology-centric world” (Abramson, 2023), Various technology platforms, applications and the like have special roles that can help students meet their learning needs. With the implementation of an online learning system, students in all corners of the world can access various platforms to learn English. Furthermore, a platform that currently exists and is becoming popular, especially among higher education circles, is ChatGPT.

The presence of ChatGPT technology has opened up and provided opportunities for AI chatbots to be utilized for education in Indonesia, and specifically in developing competencies for students that are needed at this time. It is a new language-focused application managed and developed by OpenAI, previously known as ChatBot, which relies on Artificial Intelligence

and technology for deep learning. That platform is a large-scale generative language system developed by OpenAI. The Generative Pre-trained Transformer (GPT) type, which has been successfully developed by OpenAI, has received very significant attention and attention among these types of large language models. It has become a language application that does not use considerable supervision so that human-like text on various subjects can be produced by it (Taecharungroj, 2023).

In the current era of Industrial Revolution 5.0, ChatGPT has an important role as a tool to help people live their lives. That kind of platform or what people usually know as AI (Artificial Intelligence) is intelligence that is created by using sentences and conversations that people usually do to ask questions to applications that are similar to AI (Artificial Intelligence) which automatically and briefly can get an answer. That tool can generate human language and solve complex needs, which is a very significant innovation in the field of natural language processing and artificial intelligence (Lund & Wang, 2023). This technology has been trained using NLP (Natural Language Processing), which greatly allows it to imitate human conversation. In other words, the tool can understand and respond to incoming text in a way that resembles human conversation (Setiawan & Luthfiyani, 2023). It can also be concluded that the platform collects all information through journals, newspapers, articles, and so on that have been put on the internet as a way of working, which is then all absorbed by ChatGPT as a source of information. That tool has been assessed as having strong capabilities in terms of information availability and can provide information on various topics quickly,

as well as having discussion skills and high-level thinking skills (Gilson et al., 2022), (Susnjak, 2022).

Several studies which focused on that platform issues have been conducted, such as Endang Shobayarin (2023) conducted "Utilization of ChatGPT Technology in Learning Indonesian in the Digital Era among Students at the East Java Veteran National Development University". This study shows that the tool technology can help the learning process and increase learning activities, both individually and collectively among students at the Veterans National Development University, East Java. Another research conducted by Jamal Kaid Mohammed Ali, Muayad Abdulhalim Shamsan, Taha Ahmed Hezam, and Ahmed A. Q. Mohammed (2023) entitled "Impact of ChatGPT on Learning Motivation: Teachers and Students' Voices". The research discussed the self-image and behavior associated with that tool whose participants of this study were all students and instructors of the English language with 12 survey questions. According to the findings of this study, that platform is recommended to be integrated into English language programs to promote learners; motivation to learn autonomously and under teachers' supervision. Teachers are suggested to show students how to benefit positively from it platform instead of fearing its negative impacts. The previous research has the similarities and differences of research. The similarity is the topic which is chosen to focus on ChatGPT. The first study focuses on the use of ChatGPT technology in learning Indonesian in the digital era, the second study focuses on the impact of ChatGPT on learning motivation. Therefore, the researcher of this study was motivated to find out using ChatGPT as a source

of learning english – perceived impacts on students’ competence. Researchers hope that the findings of this research will help students and teachers in developing and improving their teaching and learning strategies in utilizing technology and independent learning to increase the use of that platform as an English language learning source.

## **B. Research Problems**

The study’s problems are stated as follows, based on the research background:

1. What are students’ perceived impacts of ChatGPT as a source in learning English on their competence?
2. What are the reasons of students’ perceived impacts of ChatGPT as a source in learning English on their competence?

## **C. The Objective of The Study**

Based on the problem stated above, the goal of this study is to find out what are students’ perceived impacts of ChatGPT as a source in learning English on their competence and what are the reasons of students’ perceived impacts of ChatGPT as a source in learning English on their competence.

## **D. Assumption**

The researcher has an assumption of the study that the students’ perceived impacts of ChatGPT as a source in learning English on their competence to help students and make them easier in learning English process by that tool.

### **E. Scope and Limitation**

Based on the problem identification, the writer focuses this research to use the scope and limitation as it follows, the scope of this research is English students who are Senior High School students, English department students, and English Course students. The object of this research is ChatGPT users. This research is limited to the use of ChatGPT as a source for learning English. Researchers used a questionnaire as an instrument for this research.

### **F. Significance of the Study**

The importance of this research is to show that ChatGPT can help and make things easier for students in learning English process. In addition, the use of ChatGPT has great potential in education and this is still a new idea that is being widely discussed, and ChatGPT can be put to good use, especially in the field of education.

### **G. Definition of key terms**

There are some terms in this study which should be defined clearly, in order to avoid misunderstanding. The terms are:

#### **1. ChatGPT**

ChatGPT is a new language-focused application managed and developed by OpenAI, previously known as ChatBot, which relies on Artificial Intelligence and technology for deep learning. ChatGPT is a large-scale generative language system developed by OpenAI. The Generative Pre-trained Transformer (GPT) type, which has been successfully developed by OpenAI.

## 2. Learning English

Learning is the process of interaction of students with educators and learning resources in a learning environment (Zarrabi & Brown, 2017). While English is an International language and plays a major role in the world. Learning English is what people do when they want to use the English language.

## 3. Perception

Perception comes from the Latin words, the meanings are receiving, collecting, and action of taking possession, apprehension with the mind or senses, and perception is the first step in social cognition, commonly considered the first step in perception, (Tucker & Luu, 2021). Perception is the process of information extraction on cognitive structures and the processes that establish how people define their circle. A process that active as one selectively perceives, organizes and defines what one experiences, as cited in (Mismara, 2019).