## **CHAPTER I**

#### INTRODUCTION

This chapter explains the study's background, the research problem or research question, the study's purpose, the significance of the study, and the definition of essential words. These stages are detailed more below.

## A. Background of Study

The advancement of computer communication and information technologies has facilitated the creation of artificial intelligence. Artificial intelligence, a subfield of computer science, is the study of how robots, or computers, can carry out activities as well as or better than humans (Santoso, 2021). It is frequently referred to as the "brain of a robot" the capacity of a computer or other machine to tackle issues that are often related to greater human intellectual processing capacities. The goal of artificial intelligence is to make computerized systems more controllable, assist users, and analyze problems (Triatmaja, 2021).

The area of artificial intelligence has advanced quickly. Now, practically every aspect of life uses AI. Several industries, including education, the economy, and national defense, utilize AI (Riri, 2020). One of them, artificial intelligence, is being employed and developed more often, particularly in the educational sector. The advancement of AI use today supports the area of education that focuses on human growth as a creature with reason, knowledge, and ethics. AI will also alter how education is conducted in general. In the area of education, artificial intelligence (AI) is

used as a tool for human assistants that are displayed on virtual displays computers, and mobile devices.

Educational institutions, especially universities, serve as places where education takes place. One of the main pillars of human development is education. As the digital era develops, the way students learn has changed (Ronsumbre, 2023). In the world of education, AI can be said to be a digital assistant that helps students learn, student evaluation systems, and chat services for students. Artificial intelligence can also improve access to some educational institutions, as well as the education sector as a whole. AI has opened up many new opportunities in education that can change the way we conduct and manage learning, because in education artificial intelligence (AI) refers to the application of AI technology, one of which is ChatGPT, ChatGPT has the ability to be an easy learning aid that also allows students to get a more enjoyable and lighter learning experience.

In addition to facilitating student learning, one of the biggest challenges in education is how values are instilled in students after adapting to the AI system (Mulianingsih, 2020). In the context of self-education, ICT or information and communication technology is important. ICT is a technology-based service that allows students to use various media to enhance their knowledge. Students can be more creative in solving problems in conventional learning with the help of various ICT services and applications. Each student can use ICT with various supporting applications to become a source of independent learning. By exploring various important sites, about various supporting ICT applications (Rahmi, Iswantir, & Hariyadi, 2021) but,

students' development in acting, responding, and handling problems is also influenced by the impact of the values of honesty, competition, and responsibility.

In general, sophisticated web-based and IT applications have an important impact on students' mindset and general knowledge; they force them to think critically and carefully, and provide highly sophisticated access and interaction. However, bad things such as the habit of making full duplicates without filtering first can also occur. Students' values, character, and behavior in learning are also an issue in the use of AI. Controlling the management and use of AI-based apps and websites is one example of how this can be done. After I observed that currently many students are using ChatGPT in their activities during learning for example, using ChatGPT to find answers or questions, find the information they need, and so on, with this I want to highlight how far their learning behavior is patterned if use ChatGPT. Based on the description above, the purpose of this study is to find out more clearly about the impact of using ChatGPT on student learning behavior at State Islamic Institute of Kediri.

## **B.** Research Question

Based on the statement of the background of the study above, the problem of this study is formulated as follows: How does the use of ChatGPT affect the student's English learning behavior?

## C. Research Objective

Based on the statement of the research question of the study above, the purpose of this study is formulated as follows: To find out the impact of using ChatGPT on student's English learning behavior

## D. Scope and Limitation

Based on the statement of the background of the study, this study has scope and limitation. The scope of this study is students' opinions about changes in their own behavior after using ChatGPT in learning English. Students using ChatGPT help find information and complete assignments quickly or otherwise, they are not confident and others.

The limitation of this study is that there is no test to measure the impact of using ChatGPT on students' English learning behavior. The data taken in this study is only in the form of students' opinions.

# E. Significance

The significance of the study is a continuation of the research objectives. There are two significance of this research. Namely theoretical significance and practical significance.

### 1. Theoretical significance

- a. The results of this study are expected to provide benefits and knowledge about the use of ChatGPT.
- b. Future study findings can help in the use of AI (Artificial Intelligence) in education. This study can increase knowledge about the impact of using ChatGPT on student learning behavior.

## 2. Practical significance

#### a. Teachers

The findings of this study can help researchers to better understand and make policies on how students use ChatGPT that have an impact on student learning behavior.

#### b. Students

In the face of the recency of using ChatGPT to further understand the advantages and limits in its use.

#### c. Researchers

This study can help other researchers in contributing information or learning more about the impact of using ChatGPT on student learning behavior.

## d. For further researchers

This study can be used as a source or reference for further research on the ways in which the use of ChatGPT has an impact on student learning behavior.

# F. Definition of Key Terms

## A. AI (Artificial Intelligence)

One branch of computer science is artificial intelligence, which allows machines (computers) to perform the same or better tasks than humans. Computers were first created only for calculations, but as time goes by, their role is increasingly important to human life. Computers are no longer just used as calculating tools but are expected to do everything that humans can do (Susatyono, 2021). Image processing, planning,

forecasting, and other fields that are usually solved by human intellectual activity, as well as improving the performance of computer-based information systems, are the goals of artificial intelligence (Jaya, 2018). In addition, artificial intelligence systems have the ability to improve the understanding of how the human brain functions. Artificial intelligence is able to solve a problem besides that along with the development of the era the role of computers is increasingly leading humans.

### B. ChatGPT

Chat Generative Pre-training Transformer (GPT) is a chatbot derived from OpenAI's generative language model innovation. ChatGPT is a product of artificial intelligence technology intended to make text like the language used by people in writing or speaking (Hadian, 2020). It allows us to interact to get information, answer questions, or engage in virtual conversations with AI. Many people are impressed with how ChatGPT works because it looks well structured, has a coherent relationship between words or sentences, and has the ability to remember previous conversations in addition, ChatGPT is also fast in providing answers based on the information it has collected (Suharmawan, 2023).

## C. Learning Behavior

Learning is a personality change that results in improved behavior, including increased knowledge, skills, understanding, attitudes, and thinking power (Januar, 2013). Behavior includes all human activities or

activities, both those that can be seen directly and those that cannot be seen by others. Learning behavior can change when there are new events around. From this understanding, it can be concluded that learning behavior includes all activities or activities carried out to obtain information, understand, and develop new behaviors to achieve certain goals. The learning behavior of each individual student is different. Behavior can be in the classroom, at home, or another place (Nawawi, 2016). Writing notes, visiting the library, and reading books are also examples of learning behavior.