#### **CHAPTER I**

#### INTRODUCTION

### 1.1 Background of The Study

Artificial Intelligence also known as AI, is the advance of a computer system that can perform tasks involving human intellegence, such as pattern recognition, natural language identification, systematic decision-making, answering questions, and so on. The idea of artificial intelligence technology is to create machines with human intelligence, ability to learn from experience, and the ability to process, analyze, and use data to improve its performance in time (Gusli et al., 2023). The rapid computer system in this era of globalization cannot be ignored, as it continues to impact the field of education. Technological advances require us to keep up with them. Rapidly evolving technological nature of education, all students, regardless of level, must participate in this development and use it to enhance their knowledge, sharpen their skills, and innovate to facilitate their work(Delgado et al., 2020).

Education is one of the fastest growing fields, as technology advances. Due to the changes taking place, the use of artificial intelligence (AI) technology is gaining popularity as a subject in education. (Gusli et al., 2023) said advances in technology and digital platforms make learning English easier. According to (Nurmala et al.,2023), This will give students the opportunity to improve their English skills. highlight that the integration of technology-enhanced tools in English language teaching significantly supports students' vocabulary acquisition, grammar mastery, and speaking fluency, thus making the learning process more efficient and

engaging. However, the development of an English classroom model using artificial intelligence should be done in conjunction with English learning. Language proficiency and digital literacy are a good combination to improve global capabilities (Fitria, 2021b).

The current problem is the inappropriate use of information technology in education, especially in English language education. Many studies have shown that although technology has the potential to enhance English language learning, inappropriate use can hinder the teaching and learning process. For example, according to (Warschauer, 2002) the successful use of technology in language I how technology is used in an appropriate teaching environment. In addition, according to (Chapelle, 2007), technology should be used strategically to support specific educational goals and not simply as an additional tool without clear guidelines.

Therefore, students should be able to choose equipment that suits their needs and learning objectives. According to, (white Cynthia, 2010) the ability to select and use technology effectively is an important skill that students must have in today's digital era. This not only improves academic achievement, but also enhances students' skills in utilizing technology for their future. Previous research shows that effective AI deployment systems can increase students' motivation to learn English. The use of human intelligence applications, such as tutors and interviewers, can engage students and support language learning by providing instant feedback and adapting learning materials according to student needs (Sarica & Cavus, 2009).

Based on information above, a gap was found in this research in that many previous studies that look at the pros and cons of using technology to learn a language. However, there hasn't been much research that looks specifically at how English majors in college use AI-based tools to help them learn. Most of the studies that are out there talk more about the theoretical effects of AI in education or technology integration in general. They don't go into much detail about the experiences, preferences, and specific strategies that students use when they use AI to learn English. Also, the quick progress of AI-based tools like Quillbot, Grammarly, Google Translate, Orai, and Elsa shows how important it is to do more research on the tools students use, how they use them, and how they affect learning outcomes. Meanwhile, This study aims to fill this gap by giving a detailed look at how students see AI integration in higher education, specifically in the English department. Therefore, researchers researched "The Use of Artificial Intelligence in English Learning: Case Study in English Department".

### 1.2 Statement of the Problem

The researcher formulated the research question as follows:

- 1. How do English department students use AI applications in their English learning process?
- 2. What tools and applications have proven to be most effective in improving students' English skills?
- 3. What are the impacts of using AI applications on students' English learning outcomes in the English department?

# 1.3 Purpose of the Study

- 1. To analyze how students in the English department integrate AI applications in their English learning process.
- 2. To identify the AI tools and applications that prove most effective in improving students' English language skills and abilities.
- 3. To assess the impact of AI applications on students' English learning outcomes, focusing on aspects such as English skills improvement.

### 1.4 Significance of the Study

This research is expected to contribute theoretically as well as practically. Theoretically, this research enriches the literature on the integration of Artificial Intelligence (AI) in English language learning. This is especially important in the context of higher education. It provides insights into the impact of AI tools on the language learning tactics, enthusiasm, and total outcomes of English Department students. The results of this research can contribute to the fields of Educational Technology particularly in terms of effectively utilizing AI to support language acquisition. This research is practical. There are various stakeholders who will benefit from it. It raises awareness to students on how AI tools can support the development of English language skills, such as writing, reading, listening and speaking, and also encourage self-directed learning. The study provides lecturers and teachers with valuable insights into student interactions with AI tools, which can support curriculum design and teaching improvement. The results of this study can serve as a basis for institutions to integrate appropriate AI-based technologies into academic programs, in line with student needs and current technological

advancements. Finally, this research can be a valuable reference for future researchers who are interested in exploring the same topic or extending its reach to other educational contexts.

## 1.5 Definition of Key Terms

To minimize misunderstandings and misperceptions about the title of this study, the researcher should define the term utilized

Artificial Intelligence (AI): The machine's ability to mimic cognitive functions that are usually associated with the human brain, such as "learning" and "solving problems". Systems that can understand natural language, recognize images, learn from data, and make decisions autonomously can be made with the help of artificial intelligence. Bill Gates also recommended the use of Artificial Intelligence in education. (Viktorivna et al., 2022).

English Learning

Learning English is a process that involves improving a variety of skills such as reading, writing, speaking, and listening. Various methods, techniques, and tools are used in this process to improve English language skills. The only legitimate language that is understood by people everywhere is English. Thus, it may be concluded that English has developed into the perfect language for utilizing technology and expressing emotions. The introduction of technology in educational institutions has allowed students to learn more quickly and easily than in the pass. (Sarica & Cavus, 2009).

# 1.6 Scope and limitation

Based on background of study, this study has scope and limitation. The scope of this study is the study will focus on evaluating how effective the use of AI is in improving students' English language skills in the Department of English Language. The research will analyze a variety of tools and applications of AI, as well as how AI use affects important elements of the English language such as grammar, vocabulary, reading comprehension, and speaking skills.

This research will use qualitative methods that involve in-depth interviews through the use of Google Forms. Participatory observations and documentation studies will be used to collect data. The people involved in this study are students who are still studying in the Department of English. To cover different levels of English language proficiency, samples will be selected gradually through interview data collection methods. Time constraints and the ability to obtain the necessary resources are the limitations of this research. Furthermore, the study will not take into account external elements such as psychological or environmental factors that may influence the outcome.

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