

CHAPTER I

INTRODUCTION

This chapter presents an overview of the research, including the background of the study, research questions, research objectives, scope of the research, and significance of the study.

1.1 Rationale

Artificial Intelligence (AI) has revolutionized various industries, including education, where it is increasingly integrated into language learning. AI-powered tools such as *ChatGPT*, *Grammarly*, *Duolingo*, and *ELSA Speak* offer personalized learning experiences, real-time feedback, and automated assessments, making them valuable resources for students learning English as a Foreign Language (EFL) (Ningsih, Rahayu, Suryani, Martriwati, Sholikhah, & Khairas, 2024). These tools are widely used to facilitate translation, assist with writing assignments, and improve pronunciation and grammar through adaptive learning features (Persulesy, Nikijuluw, & Jakob, 2024). Patty (2024) highlights that AI tools such as chatbots and machine translation systems, offer interactive and adaptive learning, though they may also foster learner dependency and reduce human interaction. Despite the growing adoption of AI in English learning, students' perceptions of its effectiveness, benefits, and limitations remain an essential area of study (Lee, Davis, & Lee, 2024). This is supported by Malelak, Nazar, and Conterius (2024), who found that hospitality students appreciated AI's benefits for language learning but also expressed concerns over diminished critical thinking and lack of humanistic engagement in classrooms.

Nowadays, many students rely on AI tools to support their English learning process. *ChatGPT*, for example, is often used for writing assistance and conversational practice, helping learners engage in real-time interactions while refining grammar and coherence (Dochia, 2024). *Grammarly* and AI-based paraphrasing tools support students in academic writing by detecting grammatical errors and improving sentence structures (Alammar & Amin, 2023). Additionally, *ELSA Speak* helps students develop accurate pronunciation through AI-driven

phonetic corrections (Persulesy *et al.*, 2024). These AI-powered applications enhance independent learning, allowing students to study at their own pace and receive instant feedback without relying entirely on teachers.

Despite these benefits, the integration of AI in language learning presents several challenges. One concern is over-reliance on AI, where students may depend too much on AI-generated translations and writing suggestions, potentially weakening their critical thinking and independent learning skills (Ningsih *et al.*, 2024). Another issue is accuracy and bias, as AI-generated content sometimes lacks contextual understanding, leading to misinterpretations in grammar explanations and sentence structures (Lee *et al.*, 2024). In line with these concerns, Hasanah and Nurcholis (2024) found that while students appreciated the speed and convenience of *ChatGPT* in academic writing, some expressed doubts about its effect on critical thinking and writing quality, highlighting the need for guided and reflective AI use. Moreover, concerns about academic integrity arise as some students use AI tools to paraphrase or generate text without fully engaging in the learning process, increasing the risk of plagiarism (Alammar & Amin, 2023). Additionally, the digital divide remains a challenge, as not all students have equal access to AI-based learning platforms due to technological and economic barriers (Ningsih *et al.*, 2024).

The increasing use of Artificial Intelligence (AI) tools among students in completing English tasks and learning activities has raised important questions regarding their perceptions, awareness, and learning behaviors. Although AI can assist with writing, translation, and comprehension, research shows that students often lack a full understanding of how AI works and how it affects their learning outcomes (Johri, Hingle, & Schleiss, 2024). Some students perceive AI as a tool that supports understanding and increases productivity (Phan, 2023), while others tend to use it only as a shortcut, risking reduced engagement and lack of deep understanding (Woo, Susanto, & Guo, 2023). These differences in how students use AI ranging from active skill development to passive reliance, point to the need to investigate their actual perceptions of AI as a tool in English language learning. As Han, Yoo, Kim, Myung, Kim, Lim, Kim, Lee, Hong, Anh, and Ho (2023) pointed

out, structured use of AI can enhance learning when students are aware of its functions and limitations. Therefore, exploring students' perceptions at the vocational high school level is crucial to understanding how these technologies affect their attitudes, awareness, and learning experiences in the classroom.

According to Lee, Davis, and Lee (2024), students' willingness to adopt AI tools is influenced by factors such as perceived usefulness, ease of use, and social influence. The Technology Acceptance Model (TAM) suggests that students are more likely to embrace AI when they find it beneficial and user-friendly (Alammar & Amin, 2023). Furthermore, a positive perception of AI can boost students' motivation and engagement, while skepticism may result in hesitancy toward AI adoption (Persulesy *et al.*, 2024). Given the increasing role of AI in education, investigating students' experiences, Benefits, and challenges in using AI for English learning is essential for developing pedagogical strategies and technological innovations that align with students' needs (Ningsih *et al.*, 2024).

Several studies have explored students' perceptions of AI in English learning. Dochia (2024) investigated how university students perceive *ChatGPT*'s utility in second-language learning, finding that while many students viewed it as a useful tool, they also expressed concerns about accuracy and ethical use. Lee *et al.* (2024) examined AI-based tools in English writing courses, highlighting that students' perceived usefulness and ease of use significantly influenced their adoption of AI. Meanwhile, Alammar and Amin (2023) focused on AI paraphrasing tools, revealing that while students appreciated AI's ability to improve sentence structure, they were also concerned about over-reliance and a lack of critical engagement with the learning process. These studies provide valuable insights, but they predominantly focus on university students, leaving a research gap in understanding how AI is perceived by vocational high school students, who may use AI differently due to their educational context and learning objectives. This study aims to investigate how vocational high school students perceive AI in English learning, particularly regarding its benefits and challenges.

1.2 Research Questions

The following key questions direct this study:

- 1) What are students' perceptions on the use of AI as English learning tools?
- 2) What benefits and challenges do students experience when using AI as English learning tools?

1.3 Research Objectives

In line with the research questions, the objectives of this study are as follows:

- 1) To examine students' perceptions on the use of AI as English learning tools.
- 2) To identify the benefits and challenges students experience when using AI as English learning tools.

1.4 Scope of The Research

This study focuses on exploring vocational high school students' perceptions of AI use in English learning, specifically among 11th-grade students who frequently use AI-powered tools. The research examines how students perceive AI's effectiveness, its benefits, and the challenges they encounter in using AI for various language learning activities such as translation, writing assistance, pronunciation practice, and completing assignments.

1.5 Significance of The Study

This research is expected to contribute both theoretically and practically to the field of English language learning, particularly regarding the integration of Artificial Intelligence (AI) tools.

1.5.1 Theoretically

This study contributes to the expanding literature on technology integration and acceptance in education, particularly in the domain of AI-assisted English language learning. By exploring students' perceptions, it broadens the application of perception-related theories such as user attitudes toward AI within the specific context of vocational high school students, a demographic that has received limited

attention in previous research. The findings help bridge the gap in understanding how younger learners at vocational schools engage with AI-based tools, providing an empirical basis for future investigations on digital learning in secondary education.

1.5.2 Practically

1) For Students

The study encourages students to reflect on their own use of AI in English learning and become more aware of both the advantages and the limitations. Understanding how AI can support vocabulary acquisition, comprehension, and skill development may increase their motivation and autonomy in learning English. The findings also aim to help students use AI tools more responsibly to avoid over-reliance and to maintain critical thinking and creativity in their learning process.

2) For Teachers

The findings provide valuable insights for English teachers to understand how their students engage with AI tools. This knowledge can help teachers adapt their teaching strategies to better integrate AI into classroom instruction, provide relevant guidance, and ensure that students benefit from AI while still developing essential language competencies. Teachers can also identify challenges students face and take a proactive role in supporting more effective and ethical use of AI in the learning environment.

3) For Future Researchers

This research offers a foundation for further studies on AI integration in language education, especially within vocational school contexts. The empirical data presented may serve as a reference for comparative research, longitudinal studies, or experimental designs that seek to explore the long-term impact of AI on language proficiency, learner motivation, or pedagogical outcomes.