

CHAPTER I

INTRODUCTION

1.1 Background

In the digital age, where technology is integrated into education, understanding how perplexity applications can contribute to developing students' writing skills is a topic of great importance. This research aims to provide educators and students with insights into the potential benefits of using such applications and to contribute to the ongoing discourse on innovative approaches to writing instruction. Therefore, in the last ten years, designing AI education has become a top priority for educators worldwide (Sing et al., 2022).

AI in education can be broadly defined as learning with AI or learning about AI. Learning with AI involves applying AI-enabled technologies to teaching and learning practice. Artificial intelligence (AI) in education has gained significant attention in recent years, with many educational institutions and organisations exploring the potential benefits of AI-driven technologies (Dwidevi, 2021). AI applications enable teachers and students to develop AI knowledge, which refers to the ability to understand, use and evaluate critically. Discuss AI technologies and their impact on society (Su, 2023). According to Wang and Cheng (2021), teach students how to interact with AI to solve real-world problems and tasks. Learning about AI involves teaching and learning as a new subject. Teach

students to understand AI and AI futures and to learn AI development skills, such as coding (Kim, 2022). In language learning, AI-powered technologies have been incorporated into classrooms to allow students to learn with AI and develop various language skills, including speaking (Lin & Mubarak, 2021) and listening (Dizon, 2020). In particular, writing researchers and educators have designed and developed various AI-enabled tools, such as intelligent writing assistants (Godwin, 2022), educational chatbots (Lin & Chang, 2020), and automated writing.

Research has shown that the use of AI applications can have a positive impact on students' writing skills. Du Boulay (2016) mentioned that Artificial Intelligence as a practical classroom assistant. He found that students who used AI applications showed significant improvement in their writing fluency, organisation, and overall quality of their compositions compared to those who did not. The students who used an application reported higher levels of interest and enjoyment in writing compared to traditional writing instruction. This improvement to the prompts and exercises provided by the application helped students develop their critical thinking and problem-solving skills.

Another research study about partnering with AI, intelligent writing assistance, and instructed language learning was conducted by Godwin (2022). He said that advances in artificial intelligence (AI) have led to significantly improved, or in some cases, completely new, digital tools for writing. AI tools help students in the field of education, which is also

increasingly diverse; one of them is perplexity (Aayus, 2023). Moreover, AI assistants are revolutionising the way we use technology. They help us answer questions, create content, and more. Alphabet's Google and Microsoft's Bing have already implemented AI assistants such as Bard and Bing Chat. But there is a new entrant in the market, Perplexity. In education, perplexity apps can be used to create several virtual tutors, answer student questions, and provide personalised learning experiences (Aayus, 2023).

On the other hand, Perplexity-AI can also be used in the real world. AI, namely perplexity application, is still in its infancy in Indonesia, as only a few teachers are familiar with it. However, no studies that generally frame it favourably have reported on this topic. There are many considerations why researchers take this application as the primary treatment to improve the student's writing skills: (1) it ultimately delivers results and insightful insights into the complex text and consistently delivers human-like output; (2) it also free-to-use. This means that the users do not need to pay anything; it is free. There is no payment; (3) it is an easy-to-use and navigable perplexity tool. Using AI can seem complicated, but using Perplexity is easy. Its website and app are designed for easy navigation. The User Interface (UI) is simple and easy to understand. Even if when the students are new to using AI, they can easily use it to write text and find the correct answers to questions; last but not least, its versatility means that Perplexity AI extends versatility across all

its users, from researchers to writers to artists to musicians to programmers. It can help students answer questions, generate text, write creative content, summarise text, and more (Aayus, 2023). As a result, it is an excellent research tool for the casual user who does not need any sophisticated features.

Other studies found that new technological tools elevated writing teaching to a new and exciting level (Bikowski, 2016) and enhanced students' writing abilities (Margana, 2022). However, no study has been published on the use of Perplexity at the vocational school in the Indonesian context, which offers insight into how such tools influence specific aspects of writing skills, i.e., vocabulary, grammar, quality of sentences, and organization of the text. Some of them only present the use of online AI. Still, no one has explicitly used "Perplexity" in teaching writing for English as a Foreign Language class, which is specially produced for classes with teachers and students, as the Perplexity application has benefited students and teachers in writing classes. Thus, this study investigates whether Perplexity apps were effective in enhancing students' writing skills in EFL classes.

Moreover, the writer wants to determine how the use of Perplexity applications in effect the students' writing skills. Furthermore, this thesis explores the impact of using perplexity applications on students' writing skills by conducting empirical research, including surveys and writing assessments. The study investigates how these applications influence

various dimensions of writing, such as creativity, critical thinking, linguistic fluency, and overall writing quality.

1.2 Reason for Choosing the Topics

The research chooses to focus on writing skills due to the importance of this ability in various aspects of life. Writing is a crucial skill in communication, whether in academic, professional, or social contexts. Good writing skills are required in the creation of reports, presentations, or official correspondence in many fields (Khazrouni, 2019). Furthermore, many people face difficulties in writing, ranging from a lack of confidence to confusion about proper writing structures and styles (Aliyu, 2020). By focusing research on writing skills, we can identify ways to improve individuals' writing abilities, develop effective teaching methods, and understand the impact of technology on how people write. Through this research, we can strengthen individuals' writing skills and understand their significant role in modern communication.

The researcher is interested in conducting research on the relationship between students' motivation in writing and their writing skills using artificial intelligence (AI) due to the strong potential in applying AI technology to understand and enhance the writing learning process. By utilizing AI, researchers can gather and analyze large amounts of data on students' writing motivation, and writing patterns, as well as any issues or obstacles they may face (Dobrin, 2023). Additionally, AI can be used to provide personalized feedback directly related to students' needs, which

can enhance their motivation to continue practising and improving their writing skills (Celik, 2020). Moreover, integrating AI into research can broaden understanding of how technology can influence students' writing motivation and skills in this digital era. Thus, this research is expected to provide valuable insights into how AI technology can be effectively applied to enhance students' writing motivation and skills. Additionally, AI may help students with less access to academic English to receive feedback on word choice and grammar (Warschauer et al., 2023).

The relationship between writing and students' writing motivation is closely intertwined and mutually influential. When students feel successful in writing and receive positive feedback, it can boost their confidence and satisfaction with their writing skills, which, in turn, can serve as a motivation to write more. Additionally, strong personal goals for writing, such as expressing their ideas or enhancing their skills, can also be powerful motivational factors. Social context also plays a crucial role; students who feel engaged in positive writing communities tend to be more motivated to write consistently. Understanding the importance of writing in daily life can also increase students' motivation and provide space for their creativity and self-expression (Burhanudin, 2013). Therefore, students' writing motivation can be influenced by various factors, and writing with high motivation can also strengthen students' overall writing skills.

1.3 Research Problem

The most important aspect of conducting research is to answer the key questions regarding the problems that have been discovered. The research problems can be formulated as follows based on the information provided in the research background:

1. Does AI-Perplexity application influence the students' competence in writing hortatory exposition text?
2. Does AI-Perplexity influence the students' motivation in writing?

1.4 The Objectives of the Research

Based on the problem statements above, the objective of the research are formulated as follows:

1. To figure out whether or not the use of AI-Perplexity application influences the students' competence in writing hortatory exposition text.
2. To find out whether or not the use of AI-Perplexity influences the students' motivation in writing.

1.5 Significance of the Research

This research is expected to have the following positive effects on the teaching and learning of English.

- a. For the students

AI-Perplexity applications can help them organize and articulate their ideas in writing. The application of AI-powered writing tools has made a considerable contribution to students regarding cohesion and

coherence, critical thinking, lexical resources, grammatical range, and accuracy.

b. For the teachers

The English teachers can introduce this interactive media as much as possible to keep students engaged in all learning activities.

c. For the researchers

This study can be considered an informative reference source for any AI-related studies in ELT.

