

## **CHAPTER I**

### **INTRODUCTION**

In this research, the researcher explains some materials related to the title of the research. These materials can be used as guideline in conducting the research. This chapter presents about: 1) Background, 2) Research Focus and Sub-Focus, 3) Problem Formulations, 4) Objectives of the Study, 5) Significance of the Study.

#### **1.1 Background**

Writing refers to the process of expressing thoughts through written symbols. As noted by Suskie (2018), students must possess ideas to share before they begin writing. Hidayatun (2021) also underlines that writing allowed people to express their thoughts and feelings in a form that was accessible and understandable to others.

Through this process, individuals translate their internal reflections into logically structured text. The ability to write involves effectively conveying messages and information in a written form. This skill integrates various linguistic components such as vocabulary mastery, grammatical accuracy, and overall clarity of expression. Strong linguistic proficiency, including a wide vocabulary, precise syntax, and appropriate sentence structure, is essential for effective writing.

Within the English curriculum, descriptive writing plays a vital role, especially for students in the eleventh grade. It focuses on training learners to portray people, places, events, or objects vividly and in detail. This text type focuses on developing students' ability to describe people, places, objects, or events in a vivid and detailed manner. Through descriptive writing, students enhance their skills in observing, organizing ideas, and expressing their thoughts clearly and creatively. In the Indonesian curriculum, descriptive text is emphasized as a means of fostering students' ability to use language effectively for communication (Teguh, 2020). It provides a foundation for higher-level writing tasks, such as narrative or analytical writing. Furthermore, descriptive writing improves critical thinking by requiring students to select and organize relevant details that appeal to the reader's senses (Yulianawati, 2018). At the eleventh-grade level, Descriptive writing functions as a transitional stage, linking foundational writing skills from lower grades to more advanced forms expected in higher education levels. It motivates learners to explore language use creatively, which is essential for developing their overall English proficiency. Anita (2022) highlights that effective instruction in descriptive text equips students for real-world communication and contributes positively to their academic growth.

Writing proficiency is critical to students' academic success (Atayeva et al., 2019). Writing is a creative activity that stimulates creativity of students and improves their insights via regular writing practice (Permanasari, 2017). Teachers have a central responsibility in writing instruction, ensuring that students gain long-lasting and applicable knowledge essential for their personal and academic

development. Teachers bear full responsibility in the teaching and learning of writing and should utilize technology creatively to enhance the writing process.

Recent studies, such as by Coenen et al. (2021), highlight that AI based writing tools help learners improve their English writing proficiency. According to Mahmud (2023), Artificial Intelligence (AI) is a discipline of computer science that models human cognitive functions, and its applications have grown to include schooling.

In English language teaching, AI provides students with innovative learning opportunities. It enhances English language learning by facilitating conversations and providing relevant feedback. AI platforms offer numerous interactive exercises with real-time feedback. Additionally, AI tailors explanations and course materials to meet the particular needs of learners (Simon et al., 2022). AI integration in language education enables students to advance at their own pace through individualized instruction, targeted feedback, and adaptable learning possibilities. According to Subiyantoro et al. (2023), artificial intelligence has a considerable impact on English language teaching by increasing student interest and comprehension.

ChatGPT (Generative Pre-trained Transformer), an experimental AI chatbot, can comprehend daily conversations and generate text that is highly accurate and human-like (Haque et al., 2022). This AI chatbot enables rational and flexible communication. Due to its extensive training on diverse textual inputs, it can generate structured and informative content (Li, 2023). ChatGPT

enables users to type messages and receive responses based on the information it processes. However, as Arijit (2024) pointed out, ChatGPT is a rule-based approach that lacks a thorough understanding of reality and specialized information.

To address writing challenges, several technological solutions have been developed to help writers produce better quality work. One such tool is QuillBot, an advanced AI-driven writing assistant that helps users generate accurate, well structured, and coherent content (Rahmani, 2023). Rapid advancements in machine learning and natural language processing techniques have led to the creation of AI writing assistants like QuillBot. This technology analyzes text using sophisticated algorithms, offering recommendations, paraphrasing, and alternative phrasing to enhance readability, coherence, and fluency. QuillBot can also reword sentences, summarize manuscripts, suggest contextual synonyms, and streamline the review process. However, ethical considerations must be acknowledged. Overreliance on AI can hinder students' critical writing skill (Carolyn et al., 2023), the incorrect use of AI-generated content can result in plagiarism (Silvia, 2024). Furthermore, Andrea et al. (2024) emphasized the importance of transparency in AI usage, writers should clearly declare the role of AI in their work to maintain academic credibility.

Grammar checkers like Grammarly are also valuable for English learning. Mammadova (2019) states that such tools are especially helpful when access to traditional learning materials is limited. Bouchoux (2019) supports this, noting

that even simple, free tools can enhance writing. Grammarly identifies grammar and punctuation mistakes and helps students understand the corrections through clear explanations (Ghufron & Rosyida, 2018; Mubarok & Syafi'i, 2020). Comparisons with other tools like QuillBot also show different strengths that users can choose based on their needs (Yan, 2023; Nazari, 2021).

Knowing the advantages and drawbacks of programs like QuillBot, Grammarly, and ChatGPT is crucial as the use of AI in academic writing develops further (Marzuki et al., 2023; Perkins, 2023). The goal of this work is to present a thorough literature assessment on how AI applications affect English academic writing. The goal is to provide insightful information so that educators, researchers, and writers may fully utilize AI tools, resulting in more productive and efficient academic writing procedures.

Several empirical investigations have shown the effectiveness of AI technologies in improving pupils' writing abilities. Mahmoud et al. (2023) found that AI powered digital tools significantly improved students' English proficiency, with users demonstrating a 25% increase in grammar accuracy and sentence coherence. Similarly, Marwa (2023) investigated Grammarly's impact on EFL classrooms and found that students using Grammarly reduced grammar errors by 32% and improved their overall writing scores by 15%. These findings highlight AI's potential in providing instant and precise feedback that helps students correct their mistakes efficiently.

This study looks at how students perceive AI tools like Grammarly, QuillBot, and ChatGPT in terms of helping them build descriptive writing skills. These insights are critical for teachers who want to effectively integrate AI tools into writing teaching.

In summary, AI writing tools offer great potential to improve students' descriptive writing skills by providing feedback, enhancing organization, and increasing confidence. However, maintaining a balance between technology use and independent learning is essential to ensure sustainable writing development.

## **1.2 Research Focus and Sub-Focus**

### **1.2.1 Focus**

The focus of this research is implementing Artificial Intelligence (AI) tools to enhance the descriptive writing skill of eleventh grade students at SMA Negeri 3 Palembang.

### **1.2.2 Sub-Focus**

The sub-focuses of this research are:

- 1) To examine the effectiveness and students' perceptions of using ChatGPT in improving descriptive writing skills.
- 2) To examine the effectiveness and students' perceptions of using Grammarly in improving descriptive writing skills.
- 3) To examine the effectiveness and students' perceptions of using QuillBot in improving descriptive writing skills.

### **1.3 Problem Formulations**

The problem formulations in this research are:

- 1) Is it effective to use AI to enhance students' writing skill in descriptive text at SMA Negeri 3 Palembang?
- 2) What are students' perceptions of using AI in enhancing their writing skill in descriptive text at SMA Negeri 3 Palembang?

### **1.4 Objectives of the Study**

From the background and formulation of the problems above, the researcher can state the research objectives as follows:

- 1) To examine the effectiveness of AI-based tools in enhancing the descriptive writing skills of eleventh-grade students at SMA Negeri 3 Palembang.
- 2) To explore and describe students' perceptions of using Artificial Intelligence (AI) in enhancing their writing skill in descriptive text at SMA Negeri 3 Palembang.

### **1.5 Significance of the Study**

#### **1.5.1 Theoretical Significance**

This study aims to strengthen and expand existing theories concerning the integration of Artificial Intelligence (AI) tools such as ChatGPT, Grammarly, and QuillBot in improving students' writing ability, particularly in descriptive texts. By focusing on high school students, especially those in the eleventh grade, this study adds to the expanding corpus of knowledge on how AI technologies can address typical writing issues like grammar errors, vocabulary limitations, and

coherence issues. The findings are expected to enrich the theoretical foundation of technology-assisted language learning.

### **1.5.2 Practical Significance**

#### **1) For Teachers**

The results of this study can assist teachers in understanding how to effectively incorporate AI tools into writing instruction. By doing so, educators can provide more targeted and immediate feedback, helping students to overcome typical obstacles in writing, including grammatical mistakes, sentence clarity, and word selection. Furthermore, this study offers insight into how digital tools can complement traditional teaching methods to create a more engaging and supportive learning environment. A study by Jaya and Mortini (2023) demonstrated that project-based and media-supported learning approaches increase student engagement and achievement in writing.

#### **2) For Students**

Students may benefit from greater awareness of how AI tools can support their learning. These tools offer personalized guidance and real-time feedback, which may help students feel more confident and motivated in developing their writing skills. In particular, tools like Grammarly and QuillBot can help improve sentence structure and word choice, while ChatGPT encourages idea development and revision practices. This study also shows that students can use these tools as independent learning aids, fostering their autonomy and language awareness.



### **3) For Future Research**

This research can be used as a reference for future research examining the role of AI in other areas of language learning or different educational levels. It opens new opportunities for investigating how AI technology influences not only writing performance but also attitudes, motivation, and learning outcomes in various contexts. Further research could explore long-term impacts or compare different AI tools in diverse classroom environments.

#### **1.5.3 Pedagogical Significance**

From a teaching and learning perspective, this study emphasizes the potential of AI to support personalized and differentiated instruction. The use of AI tools allows teachers to guide students through the writing process more effectively, providing feedback that is both immediate and specific. These technologies can also encourage students to think more critically and develop their ideas more thoroughly. In doing so, they help to foster independent learning habits and promote a deeper engagement with the writing process.