

CHAPTER 1

INTRODUCTION

This chapter contains the background of the study, the formulation of the study, the objective of the study, the significance of the study, the scope of the study, and the definition of key terms.

1.1 Background of the study

Writing skills in Indonesia are still a major challenge, both at elementary school and college levels. Research by Utari and Rambe shows that many students have difficulty writing due to a lack of practice and minimal support from the learning environment[1]. This is in line with Tarigan's opinion, which states that writing is a skill that must be developed through continuous practice so that someone can express ideas well[2]. Unfortunately, in practice, many students do not get enough opportunities to write intensively, which results in their low ability to organize ideas systematically.

At the college level, students also face similar problems in writing scientific papers. According to Heriyudanta, the low academic writing competence among students is caused by the lack of effective writing learning and the lack of writing habits from an early age[3]. Byrne also emphasized that writing is a complex skill that requires an understanding of structure, organization of ideas, and the right choice of words so that the message conveyed can be understood clearly[4]. Therefore, it is important for educational institutions to develop more effective writing learning programs and encourage a culture of writing from an early age so that these skills can develop optimal educational institutions need to develop.

Based on my experience during teaching practice at SMAN 1 Mojosari for approximately two months (September–October), it was showed that several grade 11 students had difficulty in developing their writing skills. This difficulty was especially apparent in learning Narrative Text, where students struggled to organize ideas, construct a cohesive storyline, and use proper grammar. This is in line with Harmer's opinion, which states that writing is not just about pouring words into written form, but also involves critical thinking skills, creativity, and

understanding of language structure[5]. The difficulties experienced by these students indicate that a more effective learning approach is still needed so that they can improve their writing skills optimally.

Furthermore, low writing skills can be caused by a lack of structured practice and a lack of motivation in writing. Writing is a skill that requires continuous practice so that students are accustomed to composing texts well[6]. Unfortunately, in practice, many students lack confidence in writing because they find it difficult to choose and develop ideas. Byrne also emphasized that obstacles in writing often come from a lack of exposure to good examples of texts and a lack of opportunities for revision and feedback from teachers. Therefore, teachers need to apply more interactive learning strategies, so that students are more trained in writing and have a better understanding of the structure of narrative texts.

To overcome the problem of writing skills in Indonesia, including at SMAN 1 Mojosari, Artificial Intelligence (AI) can be an innovative and effective solution in improving students' writing skills. One way to apply AI in learning is by using AI-powered writing assistants such as ChatGPT, which can help students to compose texts with better structure, improve grammar, and provide instant feedback. AI has great potential in education because it can provide a more personalized and adaptive learning experience, which helps students learn at their own pace and needs[7]. With AI, students can be more confident in writing because they get fast feedback and can immediately correct their mistakes.

AI can also be used in writing learning to improve students' skills in writing Narrative Texts. For example, students can use AI to develop story ideas, create writing frameworks, and improve sentence structures to make writing more coherent. Research by Pinkwart shows that AI in learning can improve students' critical thinking skills and creativity, especially in writing[8]. In addition, AI can also be used in the peer review process by automatically analyzing student writing and providing recommendations for improvement. In this way, students can understand their mistakes and gradually improve the quality of their writing. With proper implementation, AI can create a more interactive and effective

learning environment, thereby helping students develop better narrative writing skills.

The use of the RACE framework (Role, Action, Context, Execute) in creating AI-based prompts can be an effective strategy to improve classroom learning by utilizing the AI-based RACE Framework, especially in developing students' writing skills. Based on research by Woo et al, good prompt engineering can improve students' understanding of AI, increase their confidence in using it, and strengthen their critical thinking skills[9]. By implementing RACE, teachers can design clearer and more focused prompts so that AI can provide more relevant and contextual responses. For example, in learning Narrative Text, teachers can compose prompts by defining the role of AI as a "professional story editor" (Role), asking AI to "correct the structure and flow of students' stories" (Action), providing information about the story's theme and main characters (Context), and determining that the final result should be feedback with suggestions for improvement (Execute).

Furthermore, the RACE framework is also in line with prompt engineering practices that have been proven effective in the academic and professional worlds. As explained in the Trust Insights RACE AI Framework, the use of more structured prompts helps AI understand tasks more specifically, reducing irrelevant or ambiguous results. By implementing this approach, students are not only helped in writing but also in understanding how to optimize interactions with AI for various academic needs. According to Knoth et al, a good understanding of prompt engineering can increase students' effectiveness in using AI technology and encourage the application of AI in learning more systematically[10]. Therefore, the integration of RACE in AI-based learning in the classroom can be an innovative solution to improve students' digital literacy skills as well as their writing skills effectively.

The use of AI in learning, especially through prompt engineering with the RACE (Role, Action, Context, Execute) framework, has great potential to improve students' writing skills. A study by Woo et al. showed that a good understanding of prompt engineering can improve AI self-efficacy, students' understanding of AI, and their critical thinking skills in composing texts[11].

On the other hand, the RACE framework, as explained in the Trust Insights RACE AI Framework, helps to create more targeted prompts, so that the interaction between students and AI becomes more effective and produces more relevant output.

In the context of classroom learning, especially in English subjects such as Narrative Text, the implementation of AI with the RACE approach allows students to get direct feedback, compose better texts, and develop their creativity in writing. As explained by Knoth et al, prompt engineering is not only a tool in the use of AI, but also a skill that can be improved through continuous training and practice[12]. Therefore, the integration of AI in education with an effective prompt strategy can be an innovative solution in overcoming the challenges of writing skills in Indonesia, while equipping students with relevant technological skills for the future.

There are many studies related to the use of AI in education, especially in improving the writing skills of EFL (English as a Foreign Language) students, with a focus on the effectiveness of technology in project-based learning, increasing creativity, and using AI as a writing aid. However, most of the existing studies focus more on descriptive writing and have not implemented a clear framework in AI-based learning, so their use is still less structured. In addition, the learning methods in previous studies were more exploratory without a systematic pedagogical model. Therefore, this study is important because it applies the RACE Framework (Role, Action, Context, Execute) as a more systematic approach in utilizing AI to improve the narrative writing skills of EFL students. With this framework, the learning process will be more focused, starting from understanding the role of AI in writing, taking action with technology, adjusting the context of the story, to executing the narrative more effectively. In addition, this study also answers the challenges in learning narrative writing which is more complex than descriptive writing, because it involves story structure, narrative cohesion, and character development. Thus, this study not only provides academic contributions to the literature of AI and language education, but can also serve as a guideline for teachers in adopting AI effectively to improve students' writing skills in the digital era.

Artificial Intelligence (AI) is increasingly being used in various fields, including education. However, most existing studies still discuss the use of AI in general and have not focused on high school students, especially in English language learning. AI is often used in automated learning systems and virtual tutors, but there is still little research on how AI can help students improve their narrative writing skills. In this study, more than 500 articles were analyzed using bibliometric analysis and topic modeling methods, with 304 articles from the Scopus database selected because they were relevant to the topic of AI in education. The results of the analysis show that the number of AI research in education has increased rapidly in recent years.

Although developed countries such as China, the United States, Russia, and the United Kingdom are leaders in this research, Indonesia is still lagging behind with only 6 articles discussing AI in education. The main obstacles in Indonesia are the lack of infrastructure, policies, and experts in the field of AI. In fact, AI has many benefits in education, such as reducing the burden on teachers, helping students learn more personally, increasing interaction in learning, and helping to identify students' learning difficulties early. AI can also improve students' critical thinking skills and creativity, which are very much needed in the digital era.

This study shows that although AI has been widely applied in higher education, its use in English learning for high school students is still very limited. Therefore, further research is needed to see how AI, especially with the RACE Framework (Role, Action, Context, Execute) approach, can help students develop narrative writing skills more effectively and interestingly[13].

1.2 Identification of the Problem

Traditional writing teaching methods in educational institutions often fail to provide personalized feedback and guidance, especially in the narrative text genre. The limitations faced by teachers, coupled with the lack of individual guidance, hinder students' progress in writing and hinder their ability to convey their thoughts effectively. By leveraging technology, educational institutions

can bridge this gap and enable students to improve their writing skills in a more individualized and effective manner.

1.3 Formulation of the study

1. Does the use of ChatGPT enhance students' narrative text-writing skills?
2. Does ChatGPT enhance students' motivation in writing?

1.4 The objective of the study

1. To find out the effect of using ChatGPT on students' narrative text writing skills.
2. To determine whether or not ChatGPT affects students' motivation in writing.

1.5 Scope and Limitation

This study will analyze the effectiveness of ChatGPT in improving students' writing proficiency, particularly in narrative texts.. The research will involve a specific group of students, such as those in a particular grade level or language proficiency level, to ensure a coherent and manageable sample size. The study will have a specific duration for the implementation of ChatGPT and the assessment of student writing proficiency. However, it is important to acknowledge that the findings may not be applicable universally, as they will be limited to the selected sample and context.

1.6 Significance of the Study

1. Theoretical

This study is expected to support the theory used in the learning process to improve students' writing skills with narrative text media by integrating the RACE Framework (Role, Action, Context, Execute). The framework provides a structured approach where students first understand the **Role** of AI in assisting narrative writing, take **Action** by utilizing AI-generated suggestions, apply the appropriate **Context** to develop coherent narratives, and finally **Execute** their ideas into well-structured narrative texts. By incorporating this framework, the

study reinforces theoretical perspectives on AI-assisted language learning and contributes to the development of structured pedagogical models for writing instruction.

2. Practical

The selection of the AI (ChatGPT) theme in this study, which uses narrative text media, can serve as a reference for English teachers looking to teach writing skills to their students using the RACE framework. Teachers can guide students through **Role** identification, helping them understand AI's function in narrative writing. During the **Action** phase, students engage with AI to refine their storytelling techniques. The **Context** stage ensures that students maintain relevance in their narratives, aligning their ideas with appropriate settings, characters, and themes. Finally, in the **Execute** phase, students refine and publish their narratives, ensuring coherence and creativity. This framework not only enhances students' narrative writing skills but also provides teachers with a structured and effective methodology for integrating AI into writing instruction.

1.7 Definition of Key Terms

1. Artificial Intelligence

Artificial intelligence (AI) is a field of computer science that focuses on creating systems that can perform tasks requiring human intelligence. These tasks include learning, reasoning, problem solving, perception, understanding language, and making decisions. Another opinion says that AI is "the science and engineering of making intelligent machines, especially computer programs, capable of performing tasks requiring human intelligence."

2. Narrative Texts

The text is structured around fantasy stories, fairy tales, folktales, and animal stories that aim to entertain readers. It contains an introduction, complication, resolution, and re-orientation.

3. EFL Learner

EFL learners are individuals who learn English in an environment where English is not the main language in everyday communication, but rather a foreign language taught in schools or educational institutions.