

CHAPTER I

INTRODUCTION

The chapter consists of general preview of the research. It includes background of the study, research question, objective of the study, significance of the study, scope and limitation of the study, definition of key terms.

A. Background of the study

Artificial intelligence (AI) has a long history in the field of education, with initial developments beginning several decades ago. In the 1960s, researchers began to explore the potential of AI in education, especially in the field of intelligent tutoring systems (ITS). As stated by Smith (2018), the introduction of ITS represents a critical turning point in the application of AI in education, since these systems are designed to offer learners individualized teaching and adjust to their specific needs. According to Samuel and Newell's (1959), pioneering work on computer-based learning, laid the foundation for the use of intelligent technology in educational settings. These systems use rule-based algorithms to deliver learning content and engage students in interactive activities. The history of AI in education shows ongoing efforts to harness smart technology for educational purposes. According to Siemens (2013), AI has a rich history in education, marked by milestones in smart tutoring systems, adaptive learning, and personalized instruction. This historical overview highlights the continuous evolution of AI in education and paves the way for exploring its particular applications in English language teaching.

According to Radford et al (2018), ChatGPT is a state-of-the-art chatbot based on OpenAI's Generative Pre-Trained Transformer- 3 (GPT3) family of

large language models and has been fine-tuned using both supervised and reinforcement learning techniques. According to Verma & Diamantidis (2021), supervised fine-tuning refers to the training using specific labelled. According to Lee et al (2018), datasets while reinforcement learning is a technique for the machine to interact with the environment to maximize rewards while exploring different possibilities autonomously. According to King & ChatGPT (2023), ChatGPT can engage in dialogues with users in a natural and responsive way. The neural network of the language model, which draws from large datasets to form varied strengths of connections, ensures ChatGPT can produce text responses that are similar to human language. According to MacNeil et al (2022), answer follow-up questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests. Furthermore, ChatGPT can generate text in various forms, such as essays, and poetry. With continuous input prompt by users, ChatGPT is able to improve its performance in similar tasks.

Analytical exposition text is a specific type of written discourse that aims to present an argument or opinion about a particular topic, often in a structured manner. This genre of text is characterized by its critical examination of one side of an issue, which is intended to persuade readers of the validity of the author's viewpoint. The term "analytical" implies a careful examination, while "exposition" refers to a comprehensive explanation or description of the subject matter. According to Suwartono (2023), analytical exposition text serves as a platform for writers to articulate their thoughts and persuade their audience regarding the importance of the discussed topic. An argument or

point of view that is backed up by logic and proof is presented in an analytical exposition text. Its major objective is to persuade readers by offering a logical structure and extensive study of a certain issue or topic. According to Anderson and Anderson (1997), analytical exposition texts are frequently found in essays, opinion pieces, and academic papers. They are typically distinguished by a thesis statement that is unambiguous, arguments that are supported by the text, and a conclusion. Rather than just providing facts, this text seeks to explain and evaluate a viewpoint. Therefore, the use of ChatGPT is considered to be able to speed up the writing process and encourage students to think critically in expressing opinions logically.

The several previous studies related to this study have been conducted. The main study comes from Simamora (2024) who used an experimental quantitative research design. This considers the belief that by utilizing the ChatGPT application, student errors can be identified so that teacher's can provide support. In addition, teachers can offer assistance to students to find valuable sources of thought.

The second study conducted by Sieras (2024) used a quasi-experimental pretest-posttest research design with a control group. It was seen that the quality of respondents' scientific writing changed significantly after using ChatGPT, both in language, structure, linguistic use, and mechanics. ChatGPT can be a promising tool for teachers in teaching writing skills.

The third study by Roisah (2024) used a quantitative strategy to test the expected theory through measurable analysis. It was seen that the use of ChatGPT in the classroom can make progress in students' writing skills. The test

group using ChatGPT appeared to make significant progress compared to the control group using conventional teaching strategies.

The fourth study by Pratama (2024) used a mixed research plan. The research findings show that AI innovation can be used as a medium in creating English dialect learning, especially writing skills, with improved writing skills after utilizing AI.

The fifth study by Mukhlis (2024) conducted research using a factorial design with an exploratory approach, focusing on how ChatGPT supports students in generating ideas, correcting writing mistakes, improving writing skills, and enhancing critical thinking. However, the study did not specifically explore the challenges students face when using ChatGPT or the strategies they use to overcome those challenges, especially in writing analytical texts. Therefore, further research is needed to explore these aspects more deeply, particularly how students deal with difficulties when creating analytical texts that require clear arguments and logical reasoning.

The sixth study from Nafi 'Atul (2024). The titled the use of ChatGPT in writing: English student views. The research design used is a mixed research method. For quantitative and qualitative research, researchers obtain data through questionnaires that include closed and open questions. Closed questions for quantitative data, open questions for qualitative data.

The uniqueness of this study lies in the application of ChatGPT specifically, to senior high school students in the context of essay writing. The development of artificial intelligence, especially ChatGPT, has influenced the teaching of writing in English classrooms. ChatGPT can help students

generate ideas and improve their writing, but its use also creates several challenges for teachers and students. Some students may depend too much on ChatGPT, which can reduce their critical thinking and originality. Teachers also face difficulties in guiding students and controlling the proper use of ChatGPT in writing activities.

This study focuses on exploring the challenges experienced by teachers and students in using ChatGPT in the writing classroom. Senior high school students are chosen because they are still developing their writing skills and learning responsibility in using technology. At this level, students often use digital tools independently but may not fully understand the academic and ethical issues. Studying these challenges at the senior high school level is important to support effective and responsible use of ChatGPT in writing instruction. The application of ChatGPT to teaching writing analytical exposition text presents an interesting research topic because of its potential impact on the quality and efficacy of writing teaching and learning outcomes. Discussing the obstacles in using ChatGPT is important to understand the limitations of this technology in supporting the learning process of writing analytical exposition texts effectively.

Additionally, ChatGPT encourages students to think critically when constructing texts using references. Therefore, this study aims to investigate teacher's and students' challenges of using ChatGPT as applied in writing analytical exposition text. Based on the explanation above, the researcher is interested in observing and finding out about the use of ChatGPT in teaching writing analytical exposition text in one of the schools in Kediri City which

has been applied in grade 12. In order for this research to be carried out, the researcher took the title. "Teacher's and student's challenges in teaching and learning analytical exposition text using ChatGPT".

B. Research Question

The question formulated based on the background of study above was

1. What are the teacher challenges in teaching analytical expositions text by using ChatGPT in the writing classroom?
2. What are the student's challenges in learning analytical exposition text by using ChatGPT in the writing classroom?
3. What strategies or problem-solving approaches do teacher and students in solving the application?

C. Objective of The Study

Based on the research background, the research objective is intended to investigate the teacher's and student's challenges and strategies using ChatGPT in the process of writing analytical exposition texts.

D. Significance of The Study

The researcher aims to contribute to language teaching in several ways: For students, this study provides valuable resources and helps develop critical analysis skills. Additionally, the findings may encourage teacher's to use ChatGPT, enhancing the learning challenges and strategies with student engagement in writing class and it offers ideas for creating analytical text paragraphs. It will serve as a guide for future research on new teaching methods and the use of technology in language education, potentially shaping teaching strategies and curriculum design. For other researchers, this study can

help assess the effectiveness of using ChatGPT in senior high schools.

E. Scope and Limitation of The Study

This research was conducted at SMAN 6 KEDIRI. This research focuses on challenges of use ChatGPT application for writing. The study then limited to the subject and object under study. The subjects of this research are 1 teacher of the program and 6 group from 36 twelfth grade students at SMAN 6 KEDIRI. The object of the research is focused on the application of using ChatGPT on writing analytical exposition text.

This study has several limitations regarding the challenges and solutions to the use of ChatGPT. First, the exploration of teaching problems. The challenges identified in teaching using ChatGPT may vary depending on the teacher's digital competence and students' familiarity with technology. Second, the Analytical Exposition text only focuses on the structural and linguistic difficulties faced by students. In addition, the proposed solutions to the teaching challenges and difficulties related to the use of ChatGPT are based on observations and interview responses, and have not been empirically tested for their effectiveness in various learning environments.

F. Definition of Key Term

1. Writing

Writing is a productive skill that involves the process of generating ideas, organizing thoughts, and expressing them in written form using appropriate grammar, vocabulary, and structure. In the context of English language learning, writing is considered one of the essential skills that help learners communicate effectively, demonstrate understanding, and develop

their language proficiency. It also reflects the writer's ability to construct meaning through words in accordance with the rules and conventions of the target language.

2. Exposition Text

Exposition text is a type of text that aims to present arguments or opinions in order to influence the readers to agree with the writer's point of view. It focuses on explaining, justifying, or persuading through logical reasoning and supporting evidence. In learning English, exposition text helps students develop critical thinking, organize ideas coherently, and express opinions effectively in written form.

3. ChatGPT

ChatGPT is an artificial intelligence-based language model developed by OpenAI, designed to generate text and interact in conversations in a natural way. The model uses machine learning techniques to understand and generate human language, allowing users to communicate, search for information, and get help in a variety of contexts, including writing and editing text.

4. Analytical Exposition Text

Analytical exposition text is a type of text that aims to explain and analyze a particular topic in depth by providing supporting arguments and evidence. Typically, this text consists of a thesis statement, a logically structured argument, and evidence that supports the argument. Analytical text has three generic structures, namely thesis, argument, and reiteration. Analytical texts and hortatory expositions serve different purposes in

writing. Analytical texts aim to analyze and interpret information, presenting arguments based on evidence to inform or persuade the reader about a specific topic. In contrast, hortatory expositions seek to encourage or persuade readers to take action or adopt a particular viewpoint, often using emotional appeals and direct calls to action.