

## **CHAPTER I**

### **INTRODUCTON**

This chapter serves as an introduction to the paper and consists of the background of study as a basis for considering problem of study and objective of study. It also covers the significance of the study followed by the scope of the study and definitions of key terms.

#### **1.1 Background Of Study**

The 21st century is marked by rapid technological advances in various sectors, including in the field of education. These developments have transformed how knowledge is delivered, accessed, and constructed (Sevastyanova & Sevastianova, 2021), which is resulting in a more collaborative and interactive learning environment among students and teacher.

Furthermore, technological developments in the world of education have encouraged the emergence of various new innovations. Currently, the most influential change is the emergence of artificial intelligence (AI), which has introduced new tools into educational spaces from digital platforms to autonomous language models (Pereira et al., 2022), which facilitate personalized learning experiences and assist both students and educators in managing their tasks more efficiently. This supported by Fourniawan et al., (2024) he was stated that this virtual assistant designed to support the learning process by completing tasks based on user instructions, thereby increasing efficiency and effectiveness in academic activities.

Apart from this virtual assistant being able to help students' complete assignments, the virtual assistant is also able to provide feedback quickly and accurately (Noviadhi, 2024). In the context of writing, the accuracy of the feedback provided by virtual assistants includes identifying errors in grammar, spelling and sentence structure, as well as providing suggestions for improvements that are appropriate to the context (Fleckenstein et al., 2023). Means that these virtual assistants have continued not only to evolve into more advanced and specialized tools that are widely adopted in academic settings, but also influence the process of resulting the writing itself.

According to (Kumar, 2020) there are the most tools that often use among students such as ChatGPT, Grammarly, Brain Text *AI*, black box *AI* and Perplexity *AI*. Each of these *AI* tools has a different specific function; for example, they can generate text, correct grammatical errors, improve style and coherence, and make suggestions for clarifying and improving writing. All of these tools utilize natural language processing (NLP) to help users create high-quality writing that suits their needs.

With the various conveniences offered by artificial intelligence (*AI*) in the writing process, on the other hand, writers have identified essential step in learning to write that are beginning to be neglected. These steps are crucial in developing students' writing skills gradually, but they are now often missed due to the facilitation offered by technology. This is in line with the findings of Subramanian et al. (2024), who state that as *AI* (artificial intelligence) technology continues to advance, its integration into academic practices is reshaping how research and

writing are approached, fostering creativity and improving overall writing proficiency.

Before ChatGPT appeared, the writing process was mostly done manually, and going through and conducting several important steps of the process before writing such as brainstorming, drafting, revising, editing and publishing. First, brainstorming, the brainstorming process usually involves techniques such as mind mapping, discussion, or listing ideas to explore a topic in depth. After the ideas have been collected, the writer moves on to the drafting stage, which is writing the initial draft without thinking too much about perfection. Next, the revision stage is carried out to improve the content of the writing, ensuring that the ideas are conveyed clearly and coherently, as has been stated by Chijioke & Nwala, (2021) that writing required a deep understanding of writing structure, grammar, and contextual coherence. After that, the editing stage focuses on correcting grammar, spelling and formatting. Finally, the publishing stage involves distributing the writing to readers, either through print or digital media.

With the emergence of ChatGPT, the writing process has become significantly more efficient and productive. However, it has also introduced considerable disruption to traditional, manual writing practices (Kalla et al., 2023). Unlike conventional methods, ChatGPT offers advanced capabilities that enhance the writing experience by providing personalized feedback, assisting with idea generation, and fostering improved writing quality among students (Maghamil & Sieras, 2024). These features encourage a more interactive and dynamic approach to learning, marking a significant evolution in educational technology. Tools like

ChatGPT are increasingly capable of addressing various writing challenges faced by students today.

Nevertheless, despite these conveniences, students may become less inclined to engage in deeper learning or explore the writing process independently, as much of the cognitive effort is replaced by AI-generated outputs (Shoufan, 2023). This reliance on AI tools can potentially diminish their motivation to develop critical writing skills and hinder meaningful learning experiences (Irfan et al., 2023). In the absence of engaging directly in essential writing stages such as brainstorming, drafting, revising, and editing, students are deprived of opportunities to sharpen their cognitive and linguistic competencies. As a result, their writing proficiency stagnates or even deteriorates.

Over time, if this dependency on AI continues without pedagogical intervention, students may no longer possess the ability to write independently. Writing, once a fundamental academic and expressive skill, risks being replaced entirely by automated tools. In this scenario, students are not just aided by AI they are overtaken by it, lacking the foundational writing expertise that comes from engaging in the full writing process. Consequently, when faced with tasks requiring creativity, personal voice, or deep reasoning—elements that AI cannot fully replicate—students may encounter significant challenges. This could lead to a generation that is technologically literate but compositionally weak.

Therefore, it is essential to analyze the nature and extent of the disruptions caused by ChatGPT to students' writing ability. Such analysis is vital for

formulating appropriate educational strategies that balance technological integration with the development of independent thinking and writing skills.

Frith (2023) stated the existence of ChatGPT has a big impact on the way students learn in class. This is due to ChatGPT's ability to provide instant information, support more dynamic interactions, and enable personalization of the learning experience according to individual student needs. plus, Students can use these tools to find answers to complex questions, complete writing assignments, and even get immediate feedback on their work. Of course, this is not entirely positive because excessive dependence on technology can reduce students' ability to think critically and solve problems independently. In addition, there is a risk that students prefer to rely on ChatGPT rather than conducting research or deeper exploration of the topics they are studying, as shown in the research by Fatin et al. (2024) which explains that ChatGPT facilitating student assignments, students tend to more depend on ChatGPT rather than building their capabilities. This can result in a lack of in-depth understanding and mastery of the material, because they are not actively involved in the learning process.

Although several previous studies have highlighted the advantages of ChatGPT in enhancing the quality of student writing particularly in grammar accuracy, vocabulary usage, and structural coherence its integration into academic practice has also raised serious concerns regarding its potential to erode foundational skills, especially students' writing ability. In the student context, ChatGPT functions not only as a supportive tool but also as a transformative agent that fundamentally alters how writing is conceived, constructed, and completed. The automation of the

writing process may appear to increase efficiency, but it simultaneously diminishes students' engagement with critical thinking, language planning, and self-correction strategies components that are central to developing academic literacy (Idawati, 2024).

This phenomenon can be best understood through the lens of Disruptive Innovation Theory (Christensen, 2015), which explains how new technologies initially serve as aids but gradually replace core human-centered processes, often lowering the barrier to entry but at the cost of depth and quality (Holford, 2019). In this case, ChatGPT as a kind of technology represents a disruption in the writing process, altering not only how students write, but also how they think and engage with their ideas during writing (Bhatia, 2023). Unlike traditional writing tools like Microsoft Word or Grammarly, which support manual improvement, ChatGPT can autonomously generate entire texts, this causes students bypassing essential stages of cognitive processing such as brainstorming, outlining, synthesizing information, and constructing arguments (Saxena et al., 2016). This may decrease their capacity for analytical reasoning and original expression which creates significant distractions during a student's process of producing writing, students might become overly dependent on AI-generated content without fully engaging in the writing process.

In this research, researcher will classify the disruption caused by ChatGPT to students' writing ability into three main aspects, namely cognitive, technical and social.

This research is important to carry out because there has been no research that specifically analyses the disruption created by ChatGPT on students' writing ability. Regarding the use of technology such as ChatGPT in the world of education, several previous studies have been conducted. The first research was conducted by Marzuki et al (2023). with the title of the research “The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspectives”. He found that these teachers unanimously agreed that AI writing tools positively improved the quality of their students' writing, specifically improving the quality of their content and organization.

The second research was conducted by Artiana & Fakhurriana (2024). with the research title "EFL undergraduate students' perspectives on the use of AI-based ChatGPT in academic writing.” This research aims to explore the perspectives of English as a Foreign Language (EFL) Undergraduate Program students regarding the use of Artificial Intelligence (AI)-based ChatGPT in academic writing. He found that this research provides better insight into how undergraduate EFL students perceive the use of ChatGPT in academic writing, as well as the advantages and challenges they face in using this tool.

The third research conducted by Floridi and Chiriatti (2020) discusses the development of GPT-3 and its impact on various sectors, including education. However, this research focuses more on the advantages of technology and its impact in general, rather than on its impact disturbance towards writing skills.

Furthermore, the fourth research was conducted by Rahma & Fithriani (2024). with the title of the research “The potential impact of using ChatGPT on EFL

students' writing: EFL teachers' perspectives.” Through Questionnaire and in-depth interviews, their findings showed that teachers gave an overall positive response to using ChatGPT to help improve the quality of student writing. Additionally, ChatGPT provides useful authoring features, and helps with language development. This study shows that AI technologies such as ChatGPT play an important role in facilitating students' high-quality writing.

Although previous research has primarily focused on the benefits and general impacts of technology in education, this study seeks to explore the specific disruptions caused by ChatGPT to students' writing ability. By conducting an in-depth analysis, this research aims to provide a balanced understanding of how ChatGPT influences students' writing processes, both positively and negatively.

## **1.2 Problem Of Study**

Based on the background explained, this research focuses on two main questions:

1. Are there any disruptions created by ChatGPT on a student's writing ability?
2. What are the negative impact of the disruption of ChatGPT?

## **1.3 Objectives of the Study**

The aims of this research are:

1. To analyse the disruptions created by ChatGPT on a student's writing ability.
2. To know the negative impact of the disruption of ChatGPT.

#### **1.4 Significance of the Study**

The findings or results of this research can provide useful benefits for:

##### **1. Student**

This study aims to increase student awareness regarding the potential long-term impacts of excessive dependence on AI tools such as ChatGPT in academic writing. By highlighting the importance of engaging in core writing stages such as brainstorming, drafting, revising, and editing, this research encourages students to develop their own writing competencies instead of relying entirely on machine-generated outputs. Ultimately, students are expected to become more critical and reflective in their use of technology, maintaining a balance between digital assistance and independent cognitive development.

##### **2. Teacher and Educators**

The findings of this study can serve as a valuable reference for teachers in designing more effective instructional strategies that integrate AI in writing education without neglecting essential writing skills. By understanding how ChatGPT disrupts students' writing ability, educators can intervene appropriately, guide students toward deeper engagement with the writing process, and foster critical thinking in AI-assisted environments.

##### **3. Curriculum Developers**

Curriculum developers can utilize the findings to create learning modules that balance technological tools with human-centered literacy instruction,

ensuring that students continue to build foundational writing abilities despite the presence of automation.

#### 4. Future Researchers

Theoretically, this study contributes to the growing body of literature on educational technology, particularly in the field of AI-assisted writing. It fills a research gap by specifically analyzing the types of disruption—cognitive, technical, and social—caused by ChatGPT on students’ writing processes. This opens opportunities for further studies to evaluate long-term effects or to test pedagogical models that mitigate these disruptions.

#### 5. Policy Makers in Education

The study offers critical insights that can inform education policy—particularly those related to digital literacy and AI integration in classrooms. Understanding the double-edged nature of tools like ChatGPT is essential for crafting policies that promote responsible use while preserving the pedagogical integrity of academic writing instruction.

### **1.5 Scope of Study**

This research focuses on English students at one university in Aceh who have completed the writing course.

## **1.6 Definitions of Important Terms**

### **1. Writing Ability**

Writing ability refers to a student's ability to express ideas in written form effectively, including aspects such as grammar, coherence, vocabulary usage, structure, and overall clarity of the text. In this study, writing ability is evaluated based on both technical and conceptual elements of students' written output

### **2. ChatGPT**

ChatGPT is an artificial intelligence language model developed by Open AI, designed to generate human-like text based on user prompts. In the context of this study, ChatGPT refers to its use by students as a writing tool to assist with composing, editing, and improving writing texts.

### **3. Disruption**

Disruption refers to the significant interference caused by technological tools specifically ChatGPT. This includes changes in how students' approach, complete, and engage with writing tasks, potentially affecting cognitive, technical, and social aspects of learning.