

## **CHAPTER I INTRODUCTION**

In This Chapter, The Researcher Presents: (1) Background, (2) Focus and Sub-Focus of Research, (3) Formulation of the Problem, (4) Research Purpose, (5) Benefits of Research.

### **1.1 Background**

Technological advancements have significantly transformed various aspects of human life, including education. Technology has reshaped the traditional classroom into a dynamic, interactive learning environment. Tools such as computers, smartphones, and the internet have introduced innovative approaches to teaching and learning, enhancing both engagement and outcomes. According (Mandal et al., 2022) The integration of digital tools into education facilitates collaborative learning, fostering critical thinking, and helps students with essential skills for the modern world.

Technological advances have also significantly accelerated the development of various fields, particularly in academia. In the realm of education, Artificial Intelligence (AI) plays a vital role, especially in enhancing students' academic writing abilities (Ahmed, 2022). Artificial Intelligence (AI) helping students in improving the quality of their writing like checking their grammar, and generating the relevant ideas or giving the the relevant information for their writing. According (Santoso, 2023), AI possesses the capability to analyze data, thereby aiding humans in diverse ways, especially in supporting their learning processes in academic writing.

Academic writing is a formal style of writing used in universities and academic publications. It is distinguished by its critical approach to sources and facts, well-structured arguments, and straightforward language (Aljuaid, 2024). The purpose of academic writing in universities is to develop critical thinking, communication, and research skills among students while advancing knowledge in various disciplines. Academic writing serves as a medium for students and scholars to present ideas, analyze information, and contribute to academic discourse (Dergaa, 2023). It focuses on clear communication, logical arguments supported by evidence, and following academic guidelines. Through academic writing, students develop their ability to express ideas clearly and take part in discussions within their areas of study. (Song et al., 2023). As educational standards evolving, there is an increase demand for students to developing their academic writing skills, these skills not only enhance their ability to expressing thoughts clearly but also foster critical thinking and analytical abilities (Ou, Stohr, & Malmstorm, 2024). Additionally, mastery of academic writing is essential for success in higher education, where clear communication of ideas is fundamental to collaboration, discussion, and advancement in various fields of study (Grillo & Borba, 2025). Thus, meeting the demands of academic writing is crucial for students aiming to excel in their academic pursuits and future careers.

For centuries, academic writing has evolved to equip students with the skills and knowledge they needed to succeed in various educational programs. Researchers show that this program help students in enhancing their writing

proficiency, focusing on skills like structuring and organizing academic papers (Huamán, et al., 2023). The use of Artificial Intelligence (AI) has known benefits and advantages in improving students' academic writing, and it is significantly changing the way students approach and complete their academic writing, especially by helping students face challenges such as finding references and sources of information, and to help students in adjusting academic writing standards (Marcel & Kang, 2024). This is very important for students at institutions especially for student at Universitas PGRI Palembang, where many students face the demands of academic writing. Artificial intelligence (AI) can provide students with much-needed support in several basic areas of writing preparation, helping them to overcome obstacles in an organized and effective way (Bui & Tong, 2025). By utilizing Artificial Intelligence (AI) students can improve their writing skills and achieve better academic success.

In academic writing, AI significantly reduces the workload by organize and developing the research content. According (Khalifa, 2024) AI helps organize and developing papers by expanding text idea, providing relevant suggestions, and completing the sentences, which allows students to focus more on refining their ideas and arguments. Tools like ChatGPT can also enhance writing efficiency by suggesting outlines and refining text style, making the drafting process smoother (Al Mazroui & Alzyoudi, 2024), this also align with the idea from (Bista & Bista, 2025) where they said many university students find AI tools helpful for improving the clarity of their academic

writing. In one study, doctoral students using tools like ChatGPT and Gemini reported that their writing became more organized and efficient, though they still needed to check for inaccuracies and ethical use. These tools were not only used for drafting but also for improving critical thinking through clearer argument construction. Furthermore, AI helps students by processing complex information so they could more easily understand the idea (Junio & Bandala, 2023). For editing and revising, the AI tool checks students' grammar, style and clarity of their writing, which is very useful for students, especially in English Education Study Program, because they need to compose papers and journals while using English, thereby AI helping them to meet academic writing standards.

AI tools have emerged as transformative solutions in academic writing. Platforms such as Grammarly, Quillbot, and ChatGPT are widely used to assist students in drafting, editing, and proofreading academic papers (Omodan & Marongwe, 2024). These tools enhance writing quality by identifying errors, suggesting improvements, and facilitating efficient citation management. Research indicates that integrating AI into educational practices can bridge skill gaps, particularly in writing-intensive tasks. Moreover, AI fosters self-directed learning by enabling students to analyze feedback and improve their writing mistakes (Roy, 2019). By harnessing the power of AI, we can create more engaging, personalized, and effective learning experiences. Future advancements in AI may lead to the development of intelligent tutoring systems

that can provide tailored support to students, helping them reach their full potential.

Technological progress has reshaped education, particularly in facilitating students' academic progress. At Universitas PGRI Palembang, many students face challenges when attempting to meet the rigorous demands of academic writing, particularly those in the English Education Study Program. While traditional methods of teaching academic writing remain valuable, they often fail to address the immediate needs of students who require efficient tools to enhance their output. In this context, Artificial Intelligence (AI) offers transformative potential (Burkhard, 2023). Its integration into the educational framework not only supports technical writing needs but also serves as a bridge to overcome language barriers, particularly for non-native English speakers. (Papakonstantinidis et al., 2024) emphasize that AI tools, like ChatGPT, significantly improve writing proficiency and student motivation, offering personalized assistance for language learners. This integration allows students to enhance their writing in terms of grammar, vocabulary, and structure, which traditional methods may not fully address. Similarly, (Jen & Salam, 2024) discusses the challenges students face when relying on AI for academic writing but also acknowledges the positive impact of AI tools in enhancing learning engagement and improving overall writing performance.

Building on this, (Ajiye & Omokhabi, 2025) highlights how AI tools assist in academic writing by enhancing grammar, coherence, and the overall quality of research papers. At Universitas PGRI Palembang, such tools guide

the development of research methodologies and strengthening the analytical aspects of their work. By using AI-powered systems, students can refine their literature reviews and ensure their arguments are both coherent and well-supported by credible sources (Gupta et al., 2024). AI's ability to quickly analyze large amounts of data aids students in identifying gaps in existing research, helping them pinpoint areas that require further investigation (Mohammed et al., 2024). Additionally, AI-enhanced tools provide real-time feedback on academic writing, not only addressing grammatical issues but also improving the clarity and precision of academic language. This support is invaluable for students, especially those who are non-native English speakers, as it helps them refine their research papers and enhance their overall academic performance (Kramar, 2024). Such tools, as demonstrated in recent research on ChatGPT role in supporting older adults, highlight how AI-driven systems can engage user effectively by providing accurate, personalized responses and fostering confidence in their abilities to manage difficult task (Chen & Gong, 2025). By harnessing the power of AI, we can create more engaging, personalized, and effective learning experiences.

In addition to improving students writing proficiency, AI plays a vital role in assisting students with research-related tasks. For example, AI-powered tools can help students identify and getting the relevant sources quickly, which can be particularly helpful for students at Universitas PGRI Palembang. The integration of AI tools, such as Turnitin for plagiarism detection and Mendeley for reference management, has proven to be valuable in enhancing efficiency

and accuracy in academic writing. These tools also provide crucial support in maintaining academic integrity and organizing references consistently, helping students in producing higher-quality work (Rashid et al., 2024). In Saudi Arabia, undergraduate students widely used AI tools like ChatGPT and Grammarly for grammar checks, idea generation, and writing outlines. The majority agreed that these tools saved time and improved writing, but they also voiced concerns about ethical issues and over-reliance (Ozfidan et al., 2024). This highlights the importance of guiding students in responsible AI usage. Over-reliance on AI can lead to a decline in critical thinking and creativity. It is essential to strike a balance between human knowledge and technological advancements.

Artificial Intelligence (AI) also develops learning environments that are personalized and adjusted to the needs of each student. For example, adaptive AI tools analyze students' writing patterns and provide customized feedback that focuses on repeated problems, helping them improve over time (Okolie & Egbon, 2024). Therefore, the utilize of Artificial Intelligence (AI) in education and academic writing should be use only to enhance the learning experience and improving the writing skills of students (Pereire, Komarlu, & Mobeirek, 2023). AI tools, such as grammar checkers and writing assistants, can provide real-time feedback on students' writing, helping them identify and correct errors in grammar, punctuation, and style (Abdulah et al., 2024). Additionally, AI can assist students in generating ideas, conducting research, and organizing their thoughts, making the writing process more efficient.

Advanced AI algorithms can analyze a student's writing patterns and offer personalized suggestions for improvement, catering to individual learning styles (Zhou & Schofield, 2024). Moreover, AI-powered platforms can facilitate collaborative learning by connecting students with their friends and their mentors, enabling them to share insights and refine their work. By integrating AI into the educational environment, educators can empower students to develop their academic writing skills more effectively, ultimately enhancing their critical thinking and overall academic performance (Zakaria et al., 2024). However, it is important to use these tools responsibly, ensuring that the focus stays on developing independent thinking and creativity. According to (Xu, 2024), this system is designed to guide students gradually, allowing them to develop their skills in a structured and supportive manner. This personalized approach is especially valuable for non-native English speakers at Universitas PGRI Palembang, who often face academic writing challenges.

In addition, AI enhances students' critical thinking by offering diverse perspectives on topics. Tools like ChatGPT and Grammarly allow students to construct and analyze arguments systematically, encouraging them to evaluate different viewpoints. Research by (Gerlich, 2024) highlights how such platforms stimulate the cognitive engagement of students and promote deeper understanding of complex issues. This capability aligns with the objectives of academic programs at Universitas PGRI Palembang, which emphasize the importance of critical analysis in academic writing. As technology continues to



expand in the field of education, the use of AI in writing academic papers has become essential to explore, particularly within Universitas PGRI Palembang. This technology not only assisting students with technical aspects, such as plagiarism detection and reference management, but also providing students with opportunities to developing their academic writing skills effectively. (Hz, 2023).

Moreover, the integration of AI into education has changed how students' access and interpret in research. By utilize machine learning algorithms, tools like Semantic Scholar and Connected Papers identify trends in academic literature, enabling students to frame their research within a broader academic context. This capability, as noted by (Conde et al., 2024), Artificial Intelligence (AI) not only saves time but also ensures that students remain updated with the latest advancements in their fields. For institutions like Universitas PGRI Palembang, this feature is instrumental in fostering innovative research practices among students.

This research offers several unique contributions to the academic discourse on Artificial Intelligence (AI) in education, particularly in academic writing. It specifically examines how non-native English speakers at Universitas PGRI Palembang utilize AI tools to enhance their academic writing skills. Unlike previous studies that primarily focus on the technical benefits of AI, this research provides deeper insights by exploring students' personal experiences, ethical considerations, and challenges in adapting to AI-assisted

writing tools, therefore contributing to a more comprehensive understanding of AI's role in academic writing.

First, this research focuses on the experiences of non-native English speakers at Universitas PGRI Palembang, examining how they use AI tools to improve their academic writing skill. Unlike previous research that mainly highlights the technical benefits of AI, this research digs into students' personal experiences, offering a deeper understanding of AI's impact.

Second, this research analyzes both the advantages and ethical concerns of AI use in academic writing. While AI can enhance efficiency and provide valuable writing assistance, it also raises concerns about originality and the potential overreliance on technology. By exploring the balance between AI reliance and independent writing development, this study offers a deeper understanding of its impact on students' learning processes. In doing so, the research addresses gaps in previous studies regarding the potential risks of excessive dependence on AI tools.

Third, the use of a phenomenological approach distinguishes this research by capturing students' personal perspectives and lived experiences with AI tools in academic writing. By focusing on individual experiences, this method allows for a deeper exploration of how students interact with AI, the challenges they face, and the perceived benefits of its use. This approach provides richer qualitative insights that are often overlooked in quantitative research, offering a more comprehensive understanding of AI's role in shaping academic writing practices.

Finally, the research situates its findings within the unique context of Universitas PGRI Palembang, highlighting the specific challenges local students face in meeting English academic writing standard. This localized focus offers practical insights for educational institutions in similar settings. By addressing this aspect, the research contributes to the broader discussion on the role of technology in fostering innovation and critical thinking in education.

Therefore, this research aimed to analyze the extent of AI in supporting students' academic paper writing processes at Universitas PGRI Palembang and to understand the challenges and benefits of its use in improving academic writing quality. based on this background, the researcher finds it both relevant and challenging to conduct research with the title: **“Analyzing The Use of Artificial Intelligence (AI) In Writing Academic Papers of Student at Universitas PGRI Palembang”**.

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

### **1.2.1 Research Focus**

The research focus is the specific area or topic that a researcher chooses to investigate, directing the research process from the formulation of research questions to the interpretation of results. (Breen, R, 2006). By narrowing down the scope of investigation, researcher can dig deeper into particular subject, resulting in more focused and insightful findings.

This research focused on analyzing the role and impact of Artificial Intelligence (AI) on the academic writing product of students at Universitas PGRI Palembang, particularly in enhancing their writing proficiency and managing technical aspect of writing. It aimed to understand how AI-based tools can assist students in improving their academic knowledge and idea, AI also helps students to improve their vocabulary, and effectively articulate complex ideas (Aljuaid, 2024). Additionally, this research explores how AI supports students in handling challenges in academic demands, such as formatting citations and avoiding plagiarism detection. A study by (Marzuki et al., 2023) found that 78% of students felt more confident in their academic writing after using AI for citation management and plagiarism checks. This research aims to explore how AI-based tools assist students in managing these challenges while also assessing the efficiency and confidence gains that these tools provide. By addressing these aspects, the research

seeks to offer insight into the benefits and challenges of integrating AI into academic writing and its implications for students' learning and skill development.

### **1.2.2 Research Sub-Focus**

To address the overall focus, the research specifically examined:

#### **1. The effect of using AI on the quality of student writing:**

Evaluate and analyze how the use of Artificial Intelligence (AI) affects the quality of academic papers that written by students.

#### **2. The use of AI in improving student knowledge and ideas:**

Analyze how Artificial Intelligence (AI) can improve the students' knowledge and ideas in Academic.

#### **3. Student Perceptions of AI in Writing:**

Insights from English language education students on how AI influences their productivity and writing quality, especially in composing English-language academic papers.

## **1.3 Formulation of the Problem**

**The research aimed to answer the following key questions:**

- What advantages and disadvantages do students experience in using AI to increase their writing productivity?

- How can AI be used to improve students' academic knowledge and the creativity of ideas in their writing?
- What is student perception about AI in writing academic paper?

#### **1.4 Research Purpose**

The objectives of this research are:

**1. To analyze students' perception of using Artificial Intelligence:**

This research aimed to explore students' perceptions of the use of Artificial Intelligence (AI) in their studies, examining how they view its role in helping them improve their knowledge and abilities, particularly in areas such as writing.

**2. The Use of AI in Improving Students' Knowledge and Ideas:**

This research aimed to analyze how Artificial Intelligence (AI) could support students in improving their knowledge and ideas, helping them enhance their abilities in both academic and non-academic

**3. The Effect of Using AI on the Quality of Students' Writing:**

This research analyze the effect of using Artificial Intelligence (AI) in determining students' writing quality, viewing it as an opportunity to explore how AI could benefit students in their studies.

## **1.5 Benefits of Research**

This research offering several significant benefits that might contribute to the understanding and enhancement of students' academic experiences through the use of Artificial Intelligence (AI). Firstly, by analyzing students' perceptions of AI, the research provides valuable insights into how these technologies are viewed by learners themselves. Understanding student perspectives can help educators and institutions align AI tools with the actual needs and preferences of students, ensuring that the integration of technology into the curriculum effectively addresses the challenges they face in improving their knowledge and writing skills.

Secondly, the examination of AI's role in enhancing students' knowledge and creativity has the potential to illuminate new pedagogical strategies. By identifying ways in which AI can support students in both academic and non-academic contexts, the research can guide the development of instructional practices that utilize AI as a tool for inspiration, critical thinking, and idea generation. This may lead to enriched learning experiences that foster greater engagement, innovation, and depth of understanding among students.

Lastly, by analyzing the effects of AI on the quality of students' writing, the research contributes essential data that can inform educators about the effectiveness of these tools in enhancing writing proficiency. By identifying specific areas of improvement and any potential challenge in writing quality due to AI use, the research can help in developing targeted interventions and best practices for writing instruction. This not only strengthens students'

writing abilities but also ensures they are equipped with the necessary skills for effective communication in this digital and global world. Overall, this research is created to make a meaningful contribution to educational practices by bridging the gap between technology and learning, ultimately enhancing student outcomes in writing and overall academic achievement.