

CHAPTER I

INTRODUCTION

A. Background of Study

In the contemporary landscape of the Fourth Industrial Revolution, digital technologies have become increasingly embedded in various sectors, fundamentally transforming how people interact, work, and learn. Within the realm of higher education, one of the most influential developments has been the integration of Artificial Intelligence (AI). AI technologies have permeated academic settings, especially in processes such as research, data analysis, and academic writing. Applications like ChatGPT, Grammarly, and QuillBot are now frequently utilized by students to assist in generating content, refining grammar and coherence, paraphrasing text, and checking for academic tone. These tools offer convenience and efficiency, enabling students to produce well-structured academic work within shorter periods and with fewer linguistic barriers. According to Dwivedi et al., the rise of generative AI has the potential to transform educational practices by personalizing writing support and increasing accessibility.¹ However, these advancements also bring forth new challenges in terms of digital competencies and ethical boundaries, especially for students navigating academic integrity policies in a digitally mediated environment.

¹ Yogesh K. Dwivedi et al., "Artificial Intelligence (AI): Multidisciplinary Perspectives on Emerging Challenges, Opportunities, and Agenda for Research, Practice and Policy," *International Journal of Information Management* 57 (2021), <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>.

The increasing prevalence of AI in academia highlights a broader global trend emphasizing the importance of digital literacy. As the educational landscape becomes more technologically driven, students are expected to possess not only functional technological skills but also the ability to think critically and ethically when engaging with digital tools. According to UNESCO, digital literacy defined as the ability to evaluate information, communicate responsibly online, and use technology ethically is now regarded as a core competency for navigating the 21st-century knowledge economy.² The same report underscores that digital transformation in education must not only focus on bridging gaps in access to technology but also address inequalities in critical understanding, digital ethics, and civic responsibility. These findings suggest that educational institutions must prepare students not merely as users of technology, but as reflective digital citizens, particularly in academic environments increasingly shaped by AI.

In English language education specifically, AI presents both opportunities and dilemmas. On one hand, AI can serve as a scaffold for students struggling with grammar, vocabulary, and organization in second language writing. On the other hand, the convenience of AI tools may inadvertently encourage superficial engagement with writing tasks, reducing the opportunity for authentic skill development and independent critical

² UNESCO, *Journalism Is a Public Good: World Trends in Freedom of Expression and Media Development, Global Report 2021/2022* (UNESCO Paris, 2022), <https://unesdoc.unesco.org/ark:/48223/pf0000380618%0A%0A>.

thinking. Moreover, the boundary between support and plagiarism becomes increasingly blurred. For English Education students, who are expected not only to master academic English writing but also to teach it in the future, the stakes are even higher. They must demonstrate not only technical writing proficiency but also uphold academic honesty and model ethical behaviour. Thus, examining how these students perceive, engage with, and manage AI tools is crucial to understanding the intersection of digital readiness and academic ethics in a future oriented educational context.

Despite the growing scholarly interest in AI adoption in education, existing studies often adopt a technology centered perspective, focusing primarily on the functional benefits of AI such as improved efficiency, writing fluency, or learner engagement while underexploring the social, ethical, and educational implications of such usage. For instance, research by Xiao-Fan Lin et al. in *Computers & Education* highlighted how AI-driven feedback systems could enhance student essay quality.³ However, the study did not critically engage with concerns around student dependency, originality of content, or the erosion of writing autonomy, all of which are vital aspects when discussing integrity in academic work. This technological determinism limits our understanding of how students internalize and respond to the ethical complexities introduced by AI tools in academic spaces.

³ Xiao-Fan Lin et al., “Technological Support to Foster Students’ Artificial Intelligence Ethics: An Augmented Reality-Based Contextualized Dilemma Discussion Approach,” *Computers & Education* 201 (2023): 104813, <https://doi.org/https://doi.org/10.1016/j.compedu.2023.104813>.

Moreover, research conducted in the Indonesian context remains limited in both scale and scope. For example, a study by Sari et al., explored AI literacy among Indonesian university students and found that while many were familiar with AI tools, only a fraction demonstrated a critical understanding of how to use them responsibly in academic contexts.⁴ Another relevant study by Dwihadiah et al., proposed a digital ethics framework for AI use in higher education, emphasizing the need for value-based implementation, but it did not empirically assess students' behaviour or perceptions.⁵ Meanwhile, Nurchurifiani et al., investigated how English faculty members in Indonesian universities utilize AI tools in academic writing and research.⁶ Although these studies offer important insights, they often lack a combined lens of digital literacy and ethical reasoning, and do not focus on English Education students as a distinct population. Furthermore, few studies qualitatively explore students lived experiences, ethical decision-making, and attitudes toward the use of AI in academic writing.

A notable research gap exists regarding how English Education students at UIN Sultan Maulana Hasanuddin Banten utilize AI for academic writing and perceive its ethical implications. This inquiry is especially pertinent given the

⁴ Desy K Sari et al., "Measuring Artificial Intelligence Literacy: The Perspective of Indonesian Higher Education Students," *Journal of Pedagogical Research* 9, no. 2 (2025): 143–57, <https://doi.org/https://doi.org/10.33902/JPR.202531879>.

⁵ Desideria Lumongga Dwihadiah, Niyu Niyu, and Herman Purba, "Digital Ethics Model Concerning the Use of ChatGPT in Indonesian Higher Education," *Information, Medium and Society* 23, no. 1 (2024): 1.

⁶ Eva Nurchurifiani et al., "Leveraging AI-Powered Tools in Academic Writing and Research: Insights from English Faculty Members in Indonesia," *International Journal of Information and Education Technology* 15, no. 2 (2025): 312–22, <https://doi.org/10.18178/ijiet.2025.15.2.2244>.

growing integration of AI into students' academic activities and the responsibility of teacher education institutions to foster both technological literacy and ethical awareness among future educators. English Education students serve as a relevant population for this study, as their learning practices are increasingly influenced by digital tools and AI-assisted writing platforms. Exploring their readiness and ethical considerations provides valuable insights into the broader intersection of AI, literacy, and academic integrity in higher education.

In response to the gaps, this study aims to investigate the digital readiness and ethical concerns of English Education students at UIN Sultan Maulana Hasanuddin Banten, in relation to their use of Artificial Intelligence for academic writing purposes. The research intends to explore students' self-reported competencies in using AI tools, their motivations and patterns of use, and their reflections on ethical boundaries such as originality, fairness, and academic integrity. By applying a descriptive qualitative approach, this study seeks to capture nuanced perspectives, subjective interpretations, and socially constructed meanings that shape how students interact with and evaluate AI technologies in academic contexts.

The novelty of this study lies in its dual emphasis on digital readiness and ethical awareness, an approach that has not always been explored in an integrated manner in previous research. While many studies tend to address either technical skills or ethical considerations in isolation, this research

highlights their interconnection how limited digital competence can lead to ethical lapses, and how ethical values may, in turn, shape digital practices. By situating the inquiry within a specific institutional and cultural context, the study enriches the global discourse with insights that are both contextually grounded and locally relevant to a developing country setting. This localized lens is particularly significant, as socio-cultural dynamics surrounding AI use often vary markedly between the global North and South, urban and rural environments, and among students from differing socio-economic backgrounds.

The expected outcomes of the research are both theoretical and practical. Theoretically, the study will enrich the discourse on AI integration in higher education by introducing an interdisciplinary lens that combines digital literacy and ethics. Practically, the findings may serve as evidence for policymakers and academic leaders in designing AI-related guidelines, student training programs, or curriculum components that address both competence and conscience. Ultimately, this research aspires to support the development of a responsible academic culture one that not only embraces innovation but also critically reflects on its ethical implications in the pursuit of meaningful and just educational practices.

B. Identification of the Problem

Based on the research background above, the identification of the problem is as follows:

1. Limited digital readiness among students, particularly in navigating AI tools for academic writing, hinders their ability to use such technologies critically, effectively, and independently.
2. The lack of ethical awareness in AI-assisted writing poses risks such as unintentional plagiarism, overreliance on technology, and diminished responsibility for maintaining academic integrity.
3. The absence of institutional guidelines and support systems regarding the ethical and pedagogical use of AI in academic writing creates uncertainty for students, on how to use AI tools appropriately and responsibly.

C. Focus of Study

This study focuses on exploring the engagement of English Education students with Artificial Intelligence (AI) tools in academic writing at UIN Sultan Maulana Hasanuddin Banten. This study examines students' digital readiness in using AI applications such as ChatGPT, Grammarly, and QuillBot to support their writing assignments and their ethical awareness regarding originality, plagiarism, and academic integrity. The focus of this study is limited to English Education students who are currently taking or have completed the Academic Writing course, specifically those in their third and ninth semesters, to ensure that participants have relevant experience in academic writing and are familiar with AI tools. This study does not cover the technical development of the AI system, quantitative measurement of AI performance, and the use of AI in academic fields other than writing.

D. Formulation of Problems

From the information provided above regarding the problem's background, its identification, and its limitations, research problems can be formulated as follows:

1. How is the digital readiness of English Education students in using AI for academic writing?
2. How do English Education students perceive and experience ethical concerns when using AI for academic writing?

E. The Objectives of Study

The researcher determines the research objective based on the formulation of problem as follows:

1. To explore the level of digital readiness of English Education students in using artificial intelligence (AI) for academic writing
2. To explore how English Education students perceive and experience ethical concerns when using Artificial Intelligence (AI) for academic writing.

F. Significance of Study

This research is expected to provide valuable insights for various stakeholders, including students, lecturers, and future researchers. The significance of this research is outlined as follows:

1. Students

This research encourages students to reflect critically on their digital readiness and ethical awareness when using AI tools for academic writing.

It helps them develop responsible usage habits while promoting writing autonomy and academic integrity.

2. Lecturers

The findings provide valuable insights into students' AI usage patterns and ethical considerations, enabling lecturers and academic institutions to design informed teaching strategies, guidelines, or digital literacy programs that address both competence and conscience.

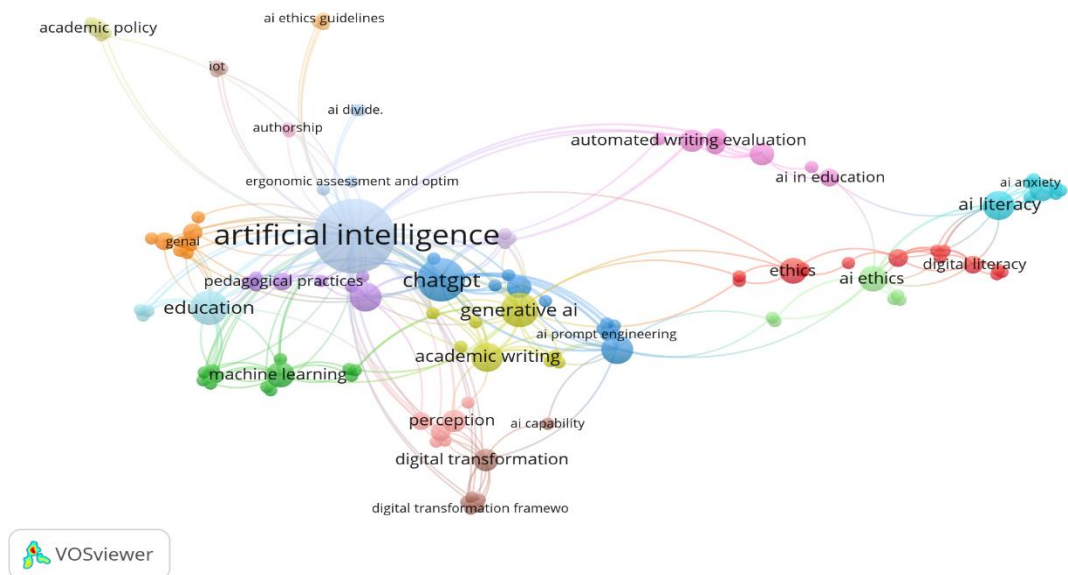
3. Future Researchers

This study serves as a foundational reference for future investigations on the intersection of AI, digital literacy, and ethics in academic writing, particularly within the context of English education in developing countries.

G. State of the Art

To support the state of the art study, researchers conducted a bibliometric analysis using VOSviewer on a collection of scientific articles discussing the use of Artificial Intelligence (AI) in the context of academic writing, with a particular emphasis on the issues of digital readiness and ethical concerns of students in its use. Bibliographic data was obtained from indexed databases such as Google Scholar and Scopus. This analysis was conducted to identify current research trends, interrelationships between concepts, and reveal research gaps that have not been widely explored and are relevant to the focus of this study. Based on the results of the keyword network map visualization, it was found that terms such as artificial intelligence, ChatGPT, academic

writing, AI ethics, digital literacy, generative AI, and perception were the most frequently appearing keywords and were strongly interconnected. This shows that studies on the integration of AI in academic writing have become an important focus in academic discourse, especially regarding how students utilize AI in writing and how they respond to these changes ethically and digitally.



Pictures 1.1 Network Visualization

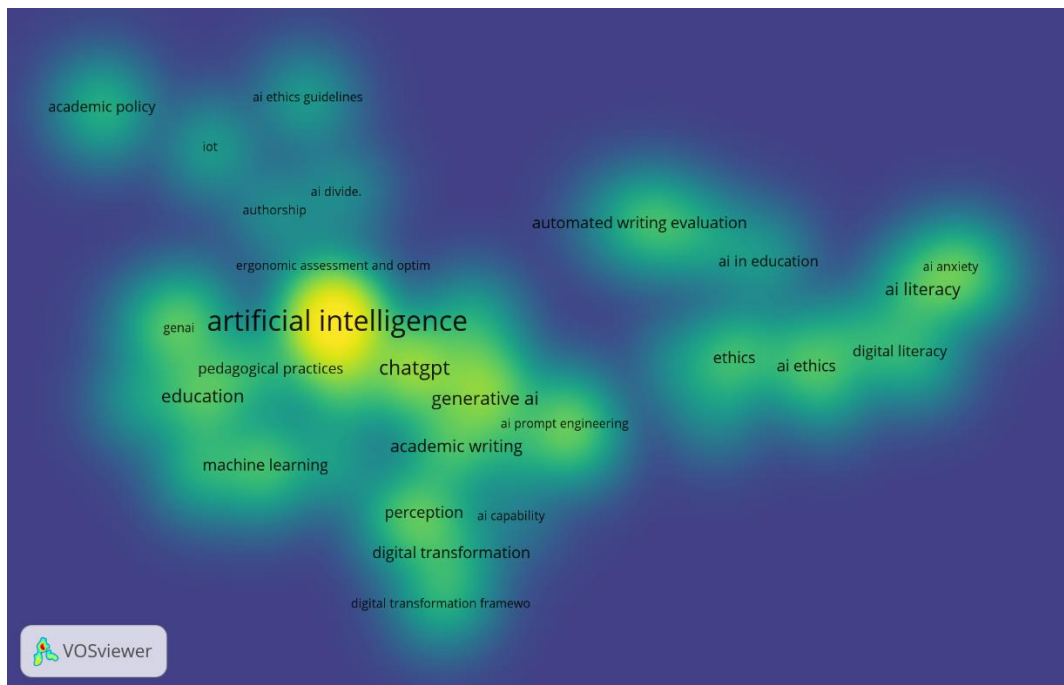
The visualization results show that the topic of artificial intelligence occupies a central position in the keyword network and is the main focal point of various other topics. This visualization displays the relationships between keywords that frequently appear together in the literature, while also showing the direction of research trends from 2022 to 2025, which is illustrated through colour gradations. In this visual network, artificial intelligence appears to be

closely connected to various other topics such as generative AI, academic writing, AI prompt engineering, and ChatGPT, all of which are closely related to the use of AI technology in the scientific writing process. In addition, there are also strong connections with keywords such as digital literacy, AI ethics, and perception, indicating that issues of digital literacy and ethical awareness in the use of AI have begun to receive attention in recent studies, although they have not yet been studied from the perspective of students as direct users.

Furthermore, VOSviewer formed several thematic clusters based on the semantic proximity and frequency of keywords in the literature. The yellow cluster, for example, illustrates the focus of research on academic writing and generative AI, showing that many studies discuss how technologies such as ChatGPT are used to automatically generate academic writing. However, this cluster does not yet address the extent to which students are prepared to operate this technology responsibly. The red cluster shows topics such as ethics, AI ethics, AI anxiety, and digital literacy, which illustrate concerns about the moral and psychological aspects of AI use, such as the potential for plagiarism, technological anxiety, and low awareness of academic responsibility. However, the connection between this cluster and the perspective of students as the main actors still seems weak, so further exploration is needed on how they understand and respond to these ethical issues.

In addition, the brown cluster containing keywords such as perception, digital transformation, and AI capability shows that perceptions of digital change have also become a part of scientific attention. However, the topic of digital readiness, both in terms of technical skills and attitudes, has not yet explicitly emerged as a main focus. In fact, in the current context of higher education, digital readiness is an important factor that determines' students' success in utilizing technology optimally. This reinforces the existence of a research gap related to students' readiness in facing AI-based technological transformation, particularly in the context of academic writing that demands originality, critical thinking, and scientific responsibility.

Thus, the results of this bibliometric analysis using VOSviewer confirm that although topics such as artificial intelligence, academic writing, and AI ethics have been widely researched, the aspects that are the focus of this study namely, digital readiness and students' ethical concerns in using AI for academic writing have not yet been widely studied. The absence of keywords such as digital readiness, student awareness, or ethical decision-making in the visualization indicates that research that raises the voices and experiences of students regarding the integration of AI in the academic world is still very open. Therefore, this study has a strategic position in filling this void and contributing to the development of a more comprehensive understanding of the readiness and ethical awareness of the academic generation in facing the era of artificial intelligence.



Pictures 1.2 Density visualization

Based on the VOSviewer visualization results with the density map in the image, it is evident that the keyword “artificial intelligence” has become the main focus in related research. This is indicated by the brightest yellow color and the largest word size, signifying a very high frequency of occurrence and a strong connection with other keywords. This interconnectedness indicates that artificial intelligence has become a primary focus in the development and study of academic writing, particularly in the context of digital learning innovation in higher education.

In addition, the keyword ChatGPT also stands out and forms a strong cluster alongside other terms such as generative AI, academic writing,

education, and pedagogical practices. This indicates that the research largely highlights the role of ChatGPT in supporting students' academic writing and its relation to the transformation of learning practices. On the other hand, the keyword AI literacy appears quite dominant and is connected with terms such as digital literacy, AI ethics, and AI anxiety, indicating a focus on the development of students' digital readiness, especially in preparing them to responsibly use AI for academic purposes.

The keyword ethical concerns also appear, although not as prominently as artificial intelligence or ChatGPT, and is connected with the terms AI ethics guidelines, authorship, and academic policy. This shows that the aspect of ethics in AI-based academic writing has started to receive attention, but it has not yet become the main focus. Meanwhile, the keywords students' perception and AI in education indicate an interest in exploring students' views and experiences in using AI, which are important in the context of modern education.

However, this analysis also identifies quite clear research gaps. Although artificial intelligence and ChatGPT have been extensively studied in the context of academic writing and education, research specifically integrating digital readiness and ethical concerns is still very limited. The relationship between AI literacy, ethical awareness, and psychological readiness such as AI anxiety has not been strongly depicted in the visualization, thus the opportunity to develop a framework of AI integration that balances digital

readiness with ethical considerations is still very open. Moreover, studies on structured and innovative strategies to optimize the responsible use of AI in academic writing are still rarely found in the literature.

Overall, the results of this analysis reinforce the argument that although previous research has highlighted the benefits of artificial intelligence in academic writing, there is still a significant opportunity to conduct a more in-depth and focused study on the integration of digital readiness and ethical concerns in AI-based academic practices. Research in this area has the potential to provide new contributions to the development of responsible and effective digital learning models, particularly in supporting students' academic writing comprehensively in the digital era.

Based on several previous studies, the use of Artificial Intelligence in higher education has been examined from various perspectives. Sari et al. investigated AI literacy among Indonesian university students and found that although many students were familiar with AI tools, only a small proportion demonstrated a critical understanding of their ethical use in academic contexts.⁷ Dwihadiah et al. proposed a digital ethics model for the use of ChatGPT in Indonesian higher education, which emphasized value-based principles, although the study was more conceptual and did not involve

⁷ Sari et al., "Measuring Artificial Intelligence Literacy : The Perspective of Indonesian Higher Education Students."

empirical data from students.⁸ Nurchurifiani et al. explored the perspectives of English faculty members on the integration of AI in academic writing and research, highlighting both its benefits and potential concerns.⁹

While these studies provide important contributions, they tend to focus on general student populations, conceptual ethical frameworks, or educators' perspectives. Meanwhile, the aspects of digital readiness and ethical concerns among English Education students have received less specific attention. There also remains room to further examine how students perceive, experience, and respond to the use of AI in academic writing, particularly regarding the interplay between digital competence and ethical awareness.

This research gap indicates an opportunity to enrich existing studies by addressing the intersection of digital readiness and ethical concerns within the context of English Education students. Therefore, this study is designed to explore the digital readiness and ethical concerns of English Education students at UIN Sultan Maulana Hasanuddin Banten in their use of AI for academic writing.

This research specifically examines English Education students' digital readiness and ethical considerations in the use of artificial intelligence for academic writing, an area that has received limited attention compared to studies on general AI literacy, ethical frameworks, or educators' viewpoints. It

⁸ Dwihadiah, Niyu, and Purba, "Digital Ethics Model Concerning the Use of ChatGPT in Indonesian Higher Education."

⁹ Nurchurifiani et al., "Leveraging AI-Powered Tools in Academic Writing and Research: Insights from English Faculty Members in Indonesia."

provides a fresh perspective on how students' technological competence and ethical reasoning influence their use of AI tools within higher education academic practices.

H. Writing Organization

The study is organized into five chapters, each of which presents important aspects of the study.

Chapter I Introduction this chapter consists of Background of the Problem, Problem Identification, Scope and Limitation of the Problem, Formulation of Problems, Objectives of Study, Significance of study, and Writing Organization.

Chapter II Theoretical Foundation this chapter provides an explanation of the main concepts and theories related to the research. This chapter includes discussions on Academic Writing, Artificial Intelligence (AI), Students' Responses, and other relevant topics that support the research.

Chapter III Research Methodology this chapter describes the research design and methodology used in the research. This chapter includes Research Design, Research Instruments, Research Location, Participants, Data Collection Techniques, and Data Analysis Techniques.

Chapter IV Research Findings and Discussion this chapter presents the collected data and provides an analysis of English Education Students' Responses on Using Artificial Intelligence (AI) For Academic Writing. This

chapter also includes a description of the results of the data obtained in the interviews that have been conducted.

Chapter V Conclusions and Suggestions this chapter contains conclusions from the results of the research that has been carried out, suggestions and a conclusion.