

The Threats and Mitigation of ChatGPT on Academic Writing in Higher Education: Educators' View

Maya Nopita¹, Dangin²

Universitas Mercu Buana Yogyakarta, Indonesia

DOI: 10.23917/humaniora.v26i2.11035

Received: June 14th, 2025. Revised: July 5th, 2025. Accepted: July 30th, 2025

Available Online: August 27th, 2025. Published Regularly: August 2025

Keywords	Abstract
Chat GPT Artificial Intelligence Technology Threats Mitigation	<i>This study examines the threats and mitigation strategies associated with the use of ChatGPT technology in higher education, with a focus on university-level educators. Using a qualitative approach with thematic analysis, interviews were conducted with four lecturers from the English Language Education Program. The findings reveal that while ChatGPT offers significant benefits, such as facilitating idea generation, accelerating the writing process, and enhancing understanding of complex materials, its excessive use poses serious risks. These include reduced student creativity, weakened critical thinking, and overreliance on instant results rather than deep learning. Educators express concern that such dependency may diminish students' ability to evaluate, analyze, and produce original academic work. To mitigate these threats, the study suggests several strategies: improving students' digital literacy, integrating ethical guidelines for AI use, limiting ChatGPT's role in academic tasks (e.g., a maximum of 25% usage), and implementing assignments that require personal reflection, discussion, presentations, and case-based projects. These approaches aim to ensure that students remain active participants in the learning process rather than passive users of AI-generated content. In conclusion, ChatGPT should be positioned as an assistive educational tool, not a replacement for students' intellectual engagement to support meaningful and responsible learning in higher education.</i>
Corresponding Author	
Maya Nopita Universitas Mercu Buana Yogyakarta Email: Novitam294@gmail.com Phone: 087761613857	

INTRODUCTION

The development of technology today is increasing rapidly. That makes it easier for students to support their learning orally and in writing. This technological development has a significant impact on educational development, particularly in higher education. The current generation needs to take advantage of the development of digital technology, which impacts convenience in everyday life. The advancement of information in higher education requires all parties to find ways to stay updated on technology. However, we must adapt to technological developments in order to improve our competence and expertise. The technology in question is artificial intelligence (AI), specifically the use of ChatGPT (Generative Pre-trained Transformer). One of the most important and

transformative technologies today is AI, which has emerged as one of the most important and revolutionary technological advances of our era Golan, 2023).

Technology is now a prevalent aspect of language learning. It is used by teachers and students both inside and outside the Classroom. They believe that technology can help language teaching and learning. Aldosari (2020). Artificial intelligence is one of the most prominent applications of contemporary information systems, a modern field of knowledge that explores and simulates human nature. Furthermore, one of the most important technologies today, driven by technological advancements, is artificial intelligence (AI). This technology is becoming one of our most essential and innovative technological advancements Golan, 2023).

ChatGPT is a promising technology in academic research. It has become increasingly popular in recent years because ChatGPT can be accessed at any time and can automate repetitive tasks. The use of ChatGPT in the service field can improve customer service and contribute significantly to consumer satisfaction Dwivedi, 2021). As a large language model (*LLM*), ChatGPT has been trained with extensive text, allowing it to generate human-like text responses. While this application can be entertaining, it has significant implications in science and academia. Some significant concerns have been raised regarding its impact on education. While ChatGPT can write articles on a wide range of topics, it is essential to recognise that its academic writing skills are still evolving. It is also important to remember that using Artificial Intelligence comes with many risks and threats, including potential dependence on technology that may be counterproductive to learning goals Misnawati, 2023). There are differences in educational quality and competitive advantage among students from various backgrounds, as well as ethical value issues that need to be considered in education, including transparency, fairness, security, and data protection.

Based on the explanation above, the development of various types of ChatGPT can bring new benefits, threats, and pressures to the world of education. Previous research, such as that conducted by Mairisiska and Qadariah (2023), supports this. The existence of ChatGPT leads to a positive perception of its ease of use, increases time efficiency and effectiveness, and encourages active learning with its assistance. This finding is also supported by research, which shows that some students are interested in utilising ChatGPT as a tool to improve the efficiency and quality of preparing seminar proposals. In addition, according to Sugiarto and Suhono (2023), ChatGPT has both positive and negative impacts. Where the positive effect is to speed up students in completing assignments and making presentation materials, while the negative impact is the lack of student creativity and dependence on AI technology; another study conducted by Hidayanti and Azmiyanti (2023) highlighted some of the threats and opportunities caused by the existence of ChatGPT, which affected accounting students' competencies related to the responsible and ethical use of ChatGPT technology in an academic context.

Previous studies, such as Rahman and Watanobe (2023), have researched student threats to ChatGPT on multiple occasions. However, the authors believe that this issue remains relevant and needs to be discussed because, to date, many students continue to use ChatGPT as an alternative means of communication and academic support. This practice can significantly affect their learning process and language skill development when using such technology. This is also supported by Kirana and Santosa (2024), the widespread adoption of ChatGPT among English as a Foreign Language (EFL) learners and its impact on academic writing and language acquisition. This study was conducted by involving English Language Education lecturers who correspond with ChatGPT for learning and utilising it in their daily lives. The researcher was interested in investigating the threats and Mitigation when using one of the AI tools called ChatGPT, which has become famous and popular due to its ease of use and the short time needed to provide answers in the learning process. This study aims to identify the threats and potential benefits that necessitate the use of ChatGPT in the Classroom or outside the Classroom

in the context of learning. Mahama (2023) "Chat GPT in Academic Writing: A Threat to Human Creativity and Academic Integrity? An Exploratory Study". This study provides a critical literature review to explore the importance of Chat GPT in academic writing, its effects on human creativity and academic integrity, and suggestions for proper adoption and implementation. The similarity between the writing above and the text that the author will write is that both highlight the threat of using Chat GPT in academic writing, but with different respondents. The difference between the above paper and the paper to be written by the author is titled "ChatGPT in Academic Writing: A Threat to Human Creativity and Academic Integrity? An Exploratory Study", as well as in terms of populations and data collection techniques used.

Based on the description and explanation above, the researcher is interested in conducting a study titled "The Threats and Mitigation of Chat GPT on Academic Writing in Higher Education: Educators' View" to find out students' threats and Mitigation of using the Chat GPT program. This study will examine how educators respond to the use of Chat GPT in students' lessons, as well as assess the impact and effectiveness of the program in helping them complete academic writing assignments. It will also explore educators' views on the advantages and disadvantages of Chat GPT, as well as how the program affects their ability to think critically and write independently. Based on some of the problems above, it can be concluded that the questions that can arise include:

1. What potential threats do educators perceive in students' use of ChatGPT in academic settings?
2. How do educators suggest mitigating the risks associated with students' use of ChatGPT in academic contexts?

METHOD

The design of this study employed a qualitative research approach, utilizing the phenomenological method as described by Max Van Manen (2016), which involves examining the meaning of the lived experiences of several individuals related to a concept or phenomenon. Van Manen (2016). The phenomenological method was employed to gain a deeper understanding of the subjective experiences of students and educators regarding the threats and potential benefits of using ChatGPT in academic writing. This approach enables researchers to explore the meaning of these experiences and gain a deeper understanding of the phenomenon under study. The analysis used in this research was thematic. The population of this study consisted of the research conducted by the English Education Department and the instructors involved at an Indonesian private university. The research sample was selected using purposive sampling, taking into account participants' active engagement with Chat GPT. The sample consisted of four English Education lecturers who had extensive experience in using Chat GPT to support teaching and learning. Specific criteria were established, particularly for the lecturers to be discussed. Each participant was required to hold at least a Master's degree, with an emphasis in language, communication, or technology studies. In addition, participants should also have experience using GPT Chat consistently for academic purposes, such as teaching, writing, research, or curriculum development, with a minimum duration of three months of use. Each participant's expertise or academic field is sought to vary, for example, from fields such as English language education, computer science, linguistics, or educational technology, and can be acquired through various means. The approximate age range of the population was between 30 and 40 years old, with two males and two females to provide a more representative view. Each participant must be willing to participate in an interview session of approximately 15 to 30 minutes and be honest when discussing their thoughts on the use of ChatGPT in higher education, particularly in the context of academic writing.

The data collection method used in this research is in-depth interviews. An in-depth interview is a data collection technique conducted through direct questioning and

answers (face-to-face) between the interviewer and the informant. This method aims to obtain more detailed and in-depth information about the research topic. In this interview process, there is direct interaction between the interviewer and the informant, which can be done with or without an interview guide. The social relationship established during the interview is relatively intensive and lasts for a specific period. Interviews were conducted over one week, adjusted to accommodate the time availability of each respondent. Each interview session lasted for approximately 15 to 30 minutes. The interview model used is an unstructured interview, as stated by Gay (2012). Unstructured interviews are more than just ordinary conversations, as they allow qualitative researchers to ask questions that provide valuable opportunities for their research. To collect valid and accurate data and information, primary data collection will be conducted through in-depth, direct interviews with the students and lecturers involved. After collecting the interview data, the researcher transcribed and analyzed the interview results. The data were analyzed using thematic analysis techniques, as described by Braun and Clarke (2019). Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) in data. Themes capture what is important about the data and the research questions; the process begins with identifying patterns of meaning and themes within the data. The endpoint is to report the content and meaning of the patterns (themes in the data). Transcribing the data should begin at the first stage, with brief notes on ideas and possible coding schemes, and the coding and analysis process should continue.

RESULT

This study aims to analyse the potential threats and Mitigation in academic writing involving the use of ChatGPT by educators, both inside and outside the Classroom in a learning context. Research data were collected through in-depth interviews with four active lecturers in the English Education Study Programme at Universitas Mercu Buana Yogyakarta. The data was then analysed using thematic analysis techniques to explore the participants' experiences.

Threat

ChatGPT is an artificial intelligence technology that lecturers are increasingly utilizing in academic activities. Most lecturers use it to help design teaching materials, create questions, and develop lesson plans. ChatGPT is also used as a primary reference when writing articles or conducting research. Although it is considered practical and efficient, some lecturers still emphasize verifying information because ChatGPT is not always accurate. In general, lecturers' responses to ChatGPT were quite positive as a tool, not as a substitute for critical thinking. The responses are below:

"If students rely on it for every step, then they will lose the ability to analyze develop critical thinking." (Participant 1).

"It will kill students' creativity"

"It won't make them think critically." (Participant 2)

"Dependency on it is a big threat literacy is important not only reading literacy but also digital literacy." (Participant 3)

"If they rely on Chat GPT too much, they will tend to be reluctant to think and activate their brain, their minds, and their critical thinking." (Participant 4).

The answers of four participants stated that the use of ChatGPT posed a threat of dependency and decreased critical thinking skills. All participants agreed that artificial intelligence (AI) can threaten critical thinking, weaken the ability to reason and make

independent decisions, and reduce creativity. They considered that AI makes students lazy to think. Therefore, the participant agreed that AI should be used with caution and not relied upon as the primary reference. AI should only be used to find ideas or inspiration, not as a primary source that is directly copied.

In the interviews with the four participants, there is a standard view that ChatGPT should be used as a tool, not as a substitute for students' thinking processes. Participant 1 said, "If students rely on it for every step, then they will lose the ability to analyze and develop critical thinking," emphasizing the importance of maintaining students' independent thought. Participant 2 also added that excessive use of ChatGPT "will kill students' creativity and it will not make them think critically," so its use should be limited to helping find ideas, not producing complete works. Additionally, all speakers agreed on the importance of digital literacy education and the ethical use of artificial intelligence (AI). Participant 3 stated, "First, by improving student awareness about digital literacy and dependency," emphasizing the importance of building awareness so that students do not rely entirely on AI. The last participant concurred by emphasizing that if students "rely on ChatGPT too much, they will tend to be reluctant to think and activate their brains, their minds, and their critical thinking."

Mitigation

The respond are below :

"Mitigation can also done in the form of facilitation that supports the development of students as humans through the teaching and learning process".

"If we suspect that students are using ChatGPT for writing, the assessment format can be changed, for example, from written assignments to oral presentations." (Participant 1)

"Teachers can provide examples of work which are produced using ChatGPT and the ones which are not, to train students how to use AI wisely instead of only controlling them."

"Also highlighted the importance of agreeing on using AI in the Classroom so that its use stays within the proper and healthy learning path (Participant 2)

"We need to create tasks that ChatGPT cannot easily answer."

"In addition, suggested the use of project-based or case-study approaches to train students' critical thinking skills directly". (Participant 3)

"I usually set the allowed use to a maximum of 25%." She also said that ChatGPT should only be used to help find ideas, not to organize the entire project and writing content.

"Should done so that students can still develop their voices and thoughts and realize their limits objectively". (Participant 4).

All four participants agreed that education, restrictions, and guidance must accompany their use to prevent erosion of students' critical thinking skills. AI should still be positioned as a tool that supports the learning process, not as a substitute for the human mind. However, Chat GPT and other AI technologies have great potential in supporting the learning process. According to Shanto (2024), efforts to mitigate the risks associated with using AI can be divided into two main approaches. First, digital ethics education should be strengthened to raise students' awareness of using AI responsibly and ethically. Second, developing emotional intelligence through social skills training and self-

reflection enables students to control their emotions, make informed decisions, and utilise technology for positive purposes.

DISCUSSION

Threat

Lecturers are increasingly using ChatGPT, an artificial intelligence tool, in their academic work. The majority of lecturers utilize it to assist in creating lesson plans, questions, and instructional materials. Additionally, ChatGPT serves as a key source of information when conducting research or producing articles. Despite being regarded as valuable and practical, some instructors nevertheless stress the importance of double-checking material because ChatGPT is not always reliable. Overall, lecturers responded well to ChatGPT as a tool, not as a replacement for critical thinking and professional judgment. This agrees with the findings of Walter (2024) argues that critical thinking skills are needed to assess AI output, avoid reliance on AI, and ensure a deep understanding of the material. This dependency causes students to focus solely on results rather than the process of reasoning and thinking rationally and systematically. The process trains them to understand, evaluate, and find solutions to problems. According to Yue Yim (2024), the element of critical thinking is reflected in the AI literacy framework reviewed. He emphasised the importance of equipping students to use AI technically, as well as the ability to understand, evaluate, and respond to the use of AI critically and wisely. That aligns with the interviewee's statement that critical thinking is essential for making informed decisions, filtering information, and solving complex problems independently. Suppose students do not develop the habit of gathering information and solving problems independently from an early age. In that case, they will find it challenging to face real-life situations that cannot be solved by careful thinking. Therefore, students must continue to practice critical thinking skills, even though technology can assist them in solving many problems.

According to Spector and Ma (2019), developing critical thinking from an early age is important to support human intelligence. It suggests that AI be used as a tool, not a substitute, in the learning process. This statement aligns with the resource person's statement because if students are accustomed to receiving information or instant answers without having to think critically or search and solve problems independently, the creative thinking process will be hindered. Thinking sharply and growing the creative side through difficulties, experiments, and challenges encourages a person to find the right way out. Suppose that the phase is ignored and avoided quickly due to dependence on instant help. In that case, students do not get the space to create original ideas to create something through the innovative potential of their original ideas. This is supported by (Blessing Funmi and Xusheng, Q. (2020), who argue that critical thinking serves as an antidote to the threat posed by AI emphasising that educators must cultivate cognitive skills to stay ahead of the machine rather than being programmed by it.

According to Catharine Coleborne and Hans Pols (2011), using AI can both help and hinder critical thinking, so developing individual and social essential skills of thinking in education is crucial. If students overuse AI without thinking critically about the information they access, they cannot distinguish accurate or misleading information. That can lead to a reduced understanding of information and weaken the ability to think critically about information. When students rely too heavily on AI assistance to complete tasks or find information, they become reluctant to think critically, analyse, or explore a deeper understanding. That leads to their brains not being optimally trained, as instant answers replace the thinking process that should stimulate intellectual function. The result, Ferreira (2024) proposed that the use of generative AI, such as ChatGPT, in higher education can enrich the learning process and improve critical thinking skills. However, this study also emphasises that AI must be guided appropriately to avoid hindering

students' development of reflective thinking. AI must be used strategically to encourage in-depth analysis, not just as a tool to obtain instant answers.

Darwin (2024) revealed that one of the threats to the use of AI is the risk of dependency. This research highlights the importance of striking a balance in the use of AI. It can be a helpful tool, but its use must be carefully managed to support the development of critical thinking skills. This statement aligns with the interviewees' responses, which indicate that critical thinking is a fundamental, high-level human skill that requires a sharp mindset, analysis, and reasoning based on logic to address situations or conditions that demand quick and precise thinking. When students are not trained to think sharply about a problem, they receive information raw and passively without knowing its clear source or validity. That makes them vulnerable to being influenced by false information and unprepared to face more difficult and complex real-life problems. Therefore, educators need to focus not only on obtaining instant results but also on the process that fosters critical thinking so that those who are still developing can form critical thinking patterns and think creatively to support students' abilities rather than relying on instant answers that make them dependent. According to Kreinsen and Schultz (2023) emphasise the importance of integrating the three main literacies, Digital Literacy, Data Literacy, and AI Literacy, in the education of prospective teachers, especially when facing the challenges and opportunities of using generative AI, such as ChatGPT. They suggest a reflective and critical approach to enable teachers to understand, explain, and teach the responsible use of AI. That goes hand in hand with an awareness of ethics, safety, and responsibility in using digital media. This reliance without understanding can cause students to become passive, lazy thinkers and easily influenced by information or news without properly filtering its meaning. Therefore, literacy education in the digital era is not only about how to access information, but it must also train students to think critically and be responsible and independent in using AI technology.

Mitigation

All four participants emphasized the importance of providing education, acknowledging apparent limitations, and offering proper guidance when using AI to ensure that students' critical thinking skills are not compromised. They agreed that AI should be seen as a supportive tool in the learning process rather than a replacement for human reasoning and intellectual effort. Additionally, they highlighted the need for educators to actively guide students in using AI responsibly, so that it enhances learning while still encouraging independent analysis and original thinking. However, ChatGPT and other AI technologies have great potential in supporting the learning process. According to Irvan and Annur (2024), risk mitigation in the application of AI in education is achieved by protecting the privacy of student data, auditing to reduce algorithmic bias, enhancing technological infrastructure, and developing ethical guidelines for the use of AI. These strategies aim to make AI implementation effective, ethical, and inclusive. Pustaka (2025). It was also revealed that, in addition to providing benefits in improving English language skills, AI brings several negative impacts. The main challenges identified include data privacy issues, where students' personal information is at risk of being misused or compromised. All four participants shared the same understanding that mitigating the threat of loss of critical thinking due to the use of ChatGPT must be done comprehensively and earnestly through educational channels, digital literacy approaches, and updating learning strategies in higher education. They emphasise that the primary threat arises when students overuse ChatGPT without fully understanding its purpose as a tool, thereby developing excessive dependence. According to Jaelani (2024), one of the risks of uncontrolled use of AI is the emergence of dependence behaviour and user abuse of artificial intelligence technology.

To mitigate the potential threats posed by over-reliance on ChatGPT in higher education, educators should adopt multifaceted strategies that integrate ethical awareness,

curriculum design, and critical digital literacy. This is in line with participant one suggestion that "if we suspect that students are using ChatGPT for writing, the assessment format can be changed, for example, from written assignments to oral presentations." Similarly, Rayyan Sunggaga (2023) argues that while ChatGPT provides various benefits, it also has negative risks that require Mitigation through skill building, discretion, and critical thinking development. Advocate for a comprehensive approach that embeds digital, data, and AI literacy into teacher education, ensuring that students are equipped not only with technical proficiency but also with ethical discernment in using AI tools. Participants two similarly noted that "teachers can provide examples of work which are produced using ChatGPT and the ones which are not, to train students how to use AI wisely instead of only controlling them," highlighting the importance of comparison and awareness. This reflects the approach proposed by Khawar (2024), who advocates giving students the opportunity to question the assumptions behind AI-generated outputs and consciously compare them to human work, thus turning students into active learners. In addition, participants added that "we need to create tasks that cannot be easily answered by ChatGPT" to stimulate critical thinking directly. Elsayed (2023) supports this strategy by designing assessment questions using Bloom's Taxonomy that are intentionally challenging for AI models, reinforcing cognitively engaging and AI-resistant tasks. Participants four also emphasized practical action by saying, "I usually set the allowed use to a maximum of 25%," encouraging students to develop their original ideas. Thus, Mitigation should not merely restrict the use of Chat GPT but foster a balanced environment where AI enhances the learning process without undermining the development of students' critical and creative thinking skills.

CONCLUSION

The study found that the use of technological tools, such as ChatGPT, was significant, and it can be concluded that the use of ChatGPT in higher education has a dual impact. On the one hand, this technology can help students find ideas, expedite the writing process, and make it easier to comprehend the material. However, if used excessively without proper guidance, ChatGPT can reduce the quality of learning because students tend to weaken critical thinking, become less inclined to read sources, and are less able to develop ideas independently. The speakers noted that dependence on ChatGPT can cause students to lose sensitivity to the learning process. They become more focused on instant results than deep understanding. As a result, creativity and analytical skills are reduced. Therefore, it is essential to instill the understanding that ChatGPT should be used as a tool, not as a substitute for students' thinking and intellectual effort. To minimise these threats, a comprehensive mitigation strategy is necessary, including increasing digital literacy, establishing ethical guidelines for AI use, and developing tasks that ChatGPT cannot easily answer. Lecturers can also limit the use of AI in assignments (for example, a maximum of 25%) and change the form of assessment to be more interactive and contextual, such as discussions, presentations, or case study-based projects. That is important so that students remain active in thinking and processing. Thus, ChatGPT is not something that should be avoided altogether; instead, it needs to be managed and its use directed wisely. This technology can be a valuable partner in the learning process if accompanied by awareness, supervision, and proper learning techniques. The role of educators is crucial in maintaining a balance between technological advances and strengthening students' critical thinking skills so that they remain prepared to face real-world challenges outside academic writing in AI.

REFERENCES

- Aldosari, S. A. M. (2020). The Future Of Higher Education In The Light of Artificial Intelligence Transformations. *International Journal of Higher Education*, 9(3), 145–

151. <https://doi.org/10.5430/ijhe.v9n3p145>
- Blessing Funmi, K., & Xusheng, Q. (2020). Critical thinking: An antidote to artificial intelligence threat—An innovation in teacher education practices. *Proceedings of the 6th International Conference on Education and Distance Learning*, 51–56. <https://doi.org/10.17501/24246700.2020.6205>.
- Braun, V., & Clarke, V. (2019). Thematic Analysis Revised. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Catharine Coleborne, & Hans Pols. (2011). From The Editors. *Health and History*, 13(2), 1. <https://doi.org/10.5401/healthhist.13.2.0001>
- Darwin, Rusdin, D., Mukminatien, N., Suryati, N., Laksmi, E. D., & Marzuki. (2024). Critical Thinking In the AI era: An exploration of EFL Students' Perceptions, Benefits, and Limitations. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2023.2290342>
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., ... Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary Perspectives on Emerging Challenges, Opportunities, and Agenda for Research, Practice and Policy. *International Journal of Information Management*, 57. <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>
- Elsayed, S. (n.d.). *Towards Mitigating ChatGPT' s Negative Impact on Education : Optimizing Question Design Through Bloom' s Taxonomy*.
- Ferreira, T. M. (2024). *A New Educational Reality: Active Methodologies Empowered by Generative AI*. <https://doi.org/10.20944/preprints202408.1933.v1>
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications* (10th ed.).
- Golan, R., Reddy, R., Muthigi, A., & Ramasamy, R. (2023). Artificial intelligence in Academic Writing: a Paradigm-shifting Technological Advance. *Nature Reviews Urology*, 20(6), 327–328. <https://doi.org/10.1038/s41585-023-00746-x>
- Hidayanti, W., & Azmiyanti, R. (2023). Dampak Penggunaan Chat GPT pada Kompetensi Mahasiswa Akuntansi: Literature Review. *Seminar Nasional Akuntansi Dan Call for Paper (SENAPAN)*, 3(1), 83–91. <https://doi.org/10.33005/senapan.v3i1.288>
- Irvan, I. A., & Annur, S. (2024). Enhancing Personalized Learning Through Artificial Intelligence (AI) In Education 5.0 A Framework For Adaptive Learning. 1, 670–680.
- Jaelani, Hidayat, E. N., & Febryantahanuji. (2024). Dampak Penerapan Kecerdasan Buatan (AI) Untuk Manajemen Kurikulum Pendidikan Tinggi Di Jawa Tengah. *Imsiah Ekonomi Dan Bisnis*, 17(1), 339–352.
- Khawar, C. (2024). Fostering critical thinking in the AI era: Innovative educational approaches for a data-driven society. *Conference presentation*, October.
- Kirana, N. P. Y., & Santosa, M. H. (2024). The use of ChatGPT in Academic Writing skills for EFL learners: A Systematic Literature Review. *EDUCAFL: Journal of Education of English as Foreign Language*, 7(2), 157–179. <https://doi.org/10.21776/ub.educafl.2024.007.02.04>
- Kreinsen, M., & Schulz, S. (2023). Towards the triad of digital literacy, data literacy and AI literacy in teacher education: A discussion in light of the accessibility of novel generative AI. *EdArXiv*. <https://doi.org/10.35542/osf.io/xguzk>.
- Mahama, I., Baidoo-Anu, D., Eshun, P., Ayimbire, B., & Eggle, V. E. (2023). ChatGPT in Academic Writing: A Threat to Human Creativity and Academic Integrity? An Exploratory Study. *Indonesian Journal of Innovation and Applied Sciences (IJIAS)*, 3(3), 228–239. <https://doi.org/10.47540/ijias.v3i3.1005>
- Mairisiska, T., & Qadariah, N. (2023). Persepsi Mahasiswa Ftik Iain Kerinci Terhadap Penggunaan Chatgpt Untuk Mendukung Pembelajaran Di Era Digital. *Jurnal*

- Teknologi Pembelajaran Indonesia*, 13, 1–10.
- Misnawati Misnawati. (2023). ChatGPT: Keuntungan, Risiko, Dan Penggunaan Bijak Dalam Era Kecerdasan Buatan. *Prosiding Seminar Nasional Pendidikan, Bahasa, Sastra, Seni, Dan Budaya*, 2(1), 54–67. <https://doi.org/10.55606/mateandrau.v2i1.221>
- Pustaka, S. T. (2025). *Perkembangan kecerdasan buatan (artificial intelligence) dan pengaruhnya pada pengajaran bahasa inggris sebuah tinjauan pustaka*. 10(1).
- Rahman, M. M., & Watanobe, Y. (2023). ChatGPT for Education and Research: Opportunities, Threats, and Strategies. *Applied Sciences (Switzerland)*, 13(9). <https://doi.org/10.3390/app13095783>
- Rayyan Sugangga, Intan Permata Sari, & Bima Teguh Wijayanto, (2023). Dampak Aplikasi Chatgpt Terhadap Dunia Usaha. *Akademika*, 21(2), 10–13. <https://doi.org/10.51881/jak.v21i2.45>
- Shanto, S. S., Ahmed, Z., & Jony, A. I. (2024). Enriching Learning Process with Generative AI A Proposed Framework to Cultivate Critical Thinking in Higher Education using Chat GPT. *Journal of Populsion Technology*, 45(1), 3019–3029. <https://doi.org/10.52783/tjjpt.v45.i01.4680>
- Spector, J. M., & Ma, S. (2019). Inquiry and Critical Thinking Skills For the Next Generation: From Artificial Intelligence Back to Human Intelligence. *Smart Learning Environments*, 6(1). <https://doi.org/10.1186/s40561-019-0088-z>
- Sugiarto, S., & Suhono, S. (2023). Studi Kasus Penggunaan ChatGPT pada Mahasiswa di PTKI Lampung. *Jurnal Al-Qiyam*, 4(2), 110–119. <https://doi.org/10.33648/alqiyam.v4i2.318>
- van Manen, M. (2016). *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. Routledge.
- Walter, Y. (2024). Embracing the future of Artificial Intelligence in the Classroom: the Relevance of AI Literacy, Prompt Engineering, and Critical Thinking in Modern Education. *International Journal of Educational Technology in Higher Education*, 21(1). <https://doi.org/10.1186/s41239-024-00448-3>
- Yue Yim, I. H. (2024). A Critical Review of Teaching and Learning Artificial Intelligence (AI) Literacy: Developing an Intelligence-Based AI Literacy Framework for Primary School Education. *Computers and Education: Artificial Intelligence*, 7(September), 100319. <https://doi.org/10.1016/j.caeai.2024.100319>