

Navigating AI Integration in Final Project Supervision: Academic Integrity, Challenges, and Best Practices

Ardiyansyah¹, Siti Aminah², Andeka Widodo³, Hafizen⁴

^{1,2,3,4}UIN Sulthan Thaha Saifuddin Jambi, Indonesia, ardiyansyah@uinjambi.ac.id

Abstract: This study examines the use of Artificial Intelligence (AI) in the undergraduate thesis supervision process for students of the Islamic Communication and Broadcasting Study Program at Universitas Islam Negeri (UIN) Sulthan Thaha Saifuddin Jambi. Employing a qualitative approach, this research involved in-depth interviews with 10 students actively completing their final projects during the 2025/2026 academic year and five thesis advisors. The findings indicate that the integration of AI offers various benefits, such as enhanced efficiency, personalized mentorship, and improved accessibility to academic references. Students reported that AI accelerates thesis revisions by providing real-time feedback and relevant literature recommendations. Meanwhile, faculty members experienced a reduced administrative workload through the automation of routine tasks, allowing them to focus on conceptual and methodological guidance. However, this study also identified significant challenges, including technological literacy gaps among both faculty and students, as well as inadequate technological infrastructure. The proposed recommendations emphasize institutional policies to improve technology training and develop digital infrastructure for academic staff and students. Consequently, AI can be effectively integrated to support the thesis supervision process and help students achieve their full academic potential.

Keywords: AI, Final Project, Integration, Navigating, Supervision

Article History:

Received: 01-08-2026

Online : 30-09-2026



This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license

A. INTRODUCTION

In the ever-evolving digital era, advanced technologies such as Artificial Intelligence (AI) have affected various aspects of life, including the education sector. One of the main challenges in higher education is the thesis guidance process, especially for Islamic Communication and Broadcasting students at Sulthan Thaha Saifuddin State Islamic University (UIN) Jambi. The thesis guidance process often requires intensive interaction between students and supervisors, which can be a burden for both parties (Wakhyudin et al., 2020). Common problems often encountered include lecturers' limited time to provide thorough guidance, as well as students' difficulties in accessing relevant resources or references.

Students often face obstacles in determining the right research topic, developing a strong theoretical framework, and evaluating research data correctly (Fadhilah et al., 2022). In addition, they also need guidance in academic writing, which includes writing structure, grammar, and formatting in accordance with academic standards. On the other hand, supervisors often have to handle a large number of students, which leads to the limited time they can allocate for each student (Megawati & Damayanti, n.d.). This can result in less than optimal guidance provided and have an impact on the quality of the thesis produced.

The utilization of AI in the thesis guidance process has great potential to overcome these obstacles. AI can provide automated guidance that assists students in writing, proofreading, and providing improvement suggestions in real-time (Nugroho, 2024). AI can perform text analysis to provide feedback on writing structure, consistency, and clarity of arguments. In addition, AI is able to manage and analyze big data to provide recommendations for relevant literature, making it easier for students to find the right references. This not only speeds up the thesis preparation process, but also improves the quality of the research produced (1a et al., 2023). AI can also help identify plagiarism and provide suggestions to improve the originality of students' scientific work.

In addition to technical guidance, AIs can also provide emotional and motivational support for students. The thesis writing process often causes stress and anxiety for students, especially when facing deadlines and academic pressure. AI can provide motivational words, time management advice, and stress coping techniques that can help students maintain their mental balance during the thesis writing process (Dewi et al., 2021).

At UIN Jambi, the application of AI in thesis guidance, especially for Islamic Communication and Broadcasting students, is relevant considering the complexity of the material discussed in this study program. Students are expected to be able to produce research that is not only based on communication and broadcasting theory, but also integrates Islamic values in accordance with the existing curriculum. With the support of AI, it is expected that students can more easily identify the relationship between theory and practice and get more directed guidance in preparing their thesis. AI can also support the development of students' analytical skills by providing fast and accurate feedback (Noviadhi et al., 2024).

However, the implementation of AI in thesis guidance also faces various challenges. One of them is the readiness of technological infrastructure on campus. To implement AI, a stable internet network and adequate hardware are required (Rane et al., 2024). In addition, the ability of lecturers and students to operate AI-based systems is also an important factor. Not all lecturers and students may have sufficient technological literacy to utilize AI effectively. Therefore, training and technical support are needed to ensure that all parties can use this technology optimally (Marito et al., 2024).

In addition, there are concerns regarding ethics and privacy in the use of student data. Data collected by AI systems should be kept confidential and used in accordance with strict privacy policies (Hidayah, 2023). Students should be given clear information on how their data will be used and kept secure. In addition, there are also ethical considerations regarding the extent to which AI can replace the role of the lecturer in the mentoring process. Although AI can provide technical guidance and advice, human interaction remains important in holistically guiding and supporting students (Rahmad et al., 2022).

Therefore, this research aims to explore the potential and challenges of utilizing AI in the thesis guidance process, as well as formulate appropriate strategies to optimize its use at UIN Jambi's Islamic Communication and Broadcasting Study Program. This research will involve a literature study regarding the application of AI in higher education, surveys and interviews with lecturers and students, as well as data analysis regarding the effectiveness of

thesis guidance using AI compared to traditional methods. The results of this research are expected to provide significant contributions in improving the effectiveness and efficiency of thesis guidance, as well as enriching the literature on the application of AI in higher education, especially in the field of Islamic Communication and Broadcasting.

In the ever-evolving digital era, Artificial Intelligence (AI) technology has brought significant changes in various aspects of life, including higher education. The use of AI in education offers opportunities to improve the quality and efficiency of teaching and learning processes, including in thesis guidance. To understand how AI can be integrated in the thesis guidance process of students of the Islamic Communication and Broadcasting Study Program at Jambi State Islamic University (UIN), it is important to examine various theories underlying the utilization of AI, academic guidance approaches, and the challenges and opportunities faced.

Technology-enhanced learning (TEL) is an approach that uses technology to enhance teaching and learning (Kirkwood & Price, 2014). According to Bates (2015), TEL includes the use of software, online learning platforms and AI to support and enrich the learning experience. TEL aims to make learning more interactive, adaptive, and suited to individual needs (Anggianita et al., 2020). In the context of higher education, AI can provide automated guidance that assists students in writing, proofreading, and providing improvement suggestions in real-time.

Artificial intelligence refers to the ability of machines to mimic human cognitive functions, such as learning, problem-solving, and decision-making (Garg, 2021). According to Russell and Norvig (2016), AI can be divided into several categories: Narrow AI, General AI, and Superintelligent AI. In the context of education, narrow AI is often used to provide guidance, automated feedback, and analysis of learning data. With these capabilities, AI can analyze big data and provide relevant literature recommendations, making it easier for students to find the right references (Khalifa & Albadawy, 2024).

Academic advising is a process that assists students in planning, developing, and achieving their academic goals. According to Grites (2013), effective academic guidance includes several elements: collaboration, personalization, and comprehensive (Pranata et al., 2025). Collaboration refers to the interaction between lecturers and students that is collaborative, while personalization refers to guidance that is tailored to the individual needs of students (Msambwa et al., 2025). Comprehensive guidance covers various aspects, including course selection, research, and career development. AI can be integrated in academic advising to support these elements. For example, AI can provide automated feedback that allows lecturers to provide more timely and effective guidance. AI can also assist in personalizing guidance by analyzing student learning data and providing tailored recommendations (Ayeni et al., 2024).

AI has been used in various higher education applications, including learning chatbots, recommendation systems, and automated assessments. Chatbots like Jill Watson at Georgia Tech help answer student questions and provide guidance. Recommendation systems analyze student learning data to provide recommendations for literature, resources, and study strategies (Goel & Polepeddi, 2018). Automated grading uses AI to correct and provide

feedback on assignments and exams. With these applications, AI can speed up the thesis preparation process and improve the quality of research produced.

The use of AI in the thesis guidance process offers various benefits, including time efficiency, real-time feedback, personalization, and accessibility. AI can automate routine tasks, so lecturers have more time to provide in-depth guidance (Aithal & Aithal, 2023). Students can receive real-time feedback, allowing them to improve their work more quickly. AI can also analyze student data and provide guidance tailored to individual needs. In addition, AI allows students to access guidance anytime and anywhere, without being limited to lecturers' working hours (Kamruzzaman et al., 2023).

While AI offers various benefits, there are also some challenges in its implementation. One of the main challenges is technology readiness. Adequate technological infrastructure is required to support the use of AI (Felemban et al., 2024). This includes a stable internet network and adequate hardware. In addition, technological literacy is an important factor. Students and lecturers must have sufficient skills to use AI effectively. Therefore, training and technical support are required to ensure that all parties can use this technology optimally (Darwin, 2025).

Data privacy and security are also major concerns in the use of AI. Data collected by AI systems must be kept confidential and used in accordance with strict privacy policies. Students should be given clear information on how their data will be used and kept secure. In addition, there are also ethical considerations regarding the extent to which AI can replace the role of lecturers in the mentoring process. While AI can provide technical guidance and advice, human interaction remains important in holistically guiding and supporting students (Troussas et al., 2025).

To overcome these challenges and maximize the benefits of AI, UIN Jambi can adopt several strategies, including training and development, infrastructure development, privacy and security policies, and collaboration with AI developers. Training and development aims to improve technological literacy among lecturers and students. Infrastructure development includes upgrading the internet network and hardware. Privacy and security policies should ensure that student data is kept confidential and used according to strict standards. Collaboration with AI developers enables the development of a system that suits the needs of thesis guidance at UIN Jambi.

The implementation of AI in thesis guidance is expected to bring positive impacts, including the improvement of thesis quality, reduction of lecturer burden, motivation and support for students, and efficiency of the guidance process. With real-time feedback and relevant literature recommendations, the quality of the thesis produced is expected to improve. AI can also reduce the burden of lecturers' routine tasks, allowing them to focus on more in-depth guidance. In addition, AI can provide emotional and motivational support, helping students overcome stress and anxiety in thesis writing. The guidance process can run more efficiently with the help of AI, allowing students to complete their thesis on time.

The utilization of AI in thesis guidance offers a range of significant benefits, including increased efficiency, personalization, and accessibility of guidance. Although there are challenges that need to be overcome, with the right strategy, AI can be integrated

successfully in the thesis guidance process at UIN Jambi. A holistic approach, including training, infrastructure development, and strict privacy policies, is necessary to ensure effective and ethical implementation. Thus, AI can be a powerful tool to support lecturers and students in achieving their academic goals, as well as improving the quality of higher education in Indonesia. This research is expected to make a significant contribution in improving the effectiveness and efficiency of thesis guidance, as well as enriching the literature on the application of AI in higher education, particularly in the field of Islamic Communication and Broadcasting. With these steps, it is expected that the utilization of AI can improve the quality of thesis guidance and help students achieve their maximum academic potential.

Thus, the results of this study are expected to provide practical recommendations that can be implemented by UIN Jambi and other universities that want to integrate AI technology in their academic advising process. These recommendations include the development of adequate technological infrastructure, training for lecturers and students, and the development of strict privacy and ethics policies. With these steps, it is expected that the utilization of AI can improve the quality of thesis guidance and help students achieve their maximum academic potential.

B. METHOD

This study uses a qualitative approach to explore the utilization of Artificial Intelligence (AI) in the thesis guidance process of Islamic Communication and Broadcasting students at Jambi State Islamic University (UIN). This method was chosen because it allows an in-depth understanding of the experiences, perceptions, and challenges faced by students and lecturers in the use of AI (Assyakurrohim et al., 2023). Data were collected through in-depth interviews, observation, and document analysis.

In-depth interviews were conducted with 10 students who were completing their thesis and 5 lecturers who were involved in the thesis guidance process. The interviews aimed to explore their experiences using AI, perceived benefits, and challenges faced. The questions in the interviews were designed in a semi-structured manner to allow flexibility in the exploration of relevant topics.

Observations were made by directly observing the interactions between lecturers and students during thesis guidance sessions using AI. This observation helped to understand how AI was integrated in the mentoring process and its impact on the mentoring dynamics.

In addition, document analysis was conducted on various sources, including interview transcripts, field notes, and screenshots of the AI platforms used. This analysis aimed to identify common patterns, key themes, and important issues related to the use of AI in thesis guidance.

The collected data were analyzed using thematic analysis techniques, which involved coding the data, identifying themes, and interpreting the results. This approach allows researchers to organize and interpret data systematically, so as to produce a comprehensive understanding of the use of AI in thesis guidance for students of the Islamic communication and broadcasting study program at UIN Jambi.

With this qualitative method, the research is expected to provide in-depth and relevant insights into how AI can be optimized to improve the quality and effectiveness of thesis guidance, as well as overcome the challenges that exist in its implementation.

C. RESULTS AND DISCUSSION

This research examines the utilization of Artificial Intelligence (AI) in the thesis guidance process for Islamic Communication and Broadcasting students at Jambi State Islamic University (UIN). Through in-depth interviews with students and lecturers, as well as analysis of related documentation, this research found various benefits, challenges, and recommendations for further development.

1. Student Experience in Using AI

The interview results showed that students felt significant benefits from using AI in thesis guidance. Most students found AI features such as automated feedback and literature recommendations helpful. One of the students, Vhira and Adit, revealed that AI accelerated the thesis revision process by providing real-time feedback on grammar and sentence structure errors. "AI helps speed up the revision process by providing real-time feedback on grammar and sentence structure errors. This allows me to correct mistakes immediately without having to wait for guidance from the dose,".

In addition, AI also makes it easier to find references relevant to the research topic. Students often face difficulties in finding appropriate literature, and AI helps them by providing specific literature recommendations based on keywords and the topic under study. Dini, another student, noted, "The literature recommendations from AI are very helpful, especially when I have trouble finding relevant sources. AI provided a list of articles and books related to my topic, so I could focus on the main research."

AI also assisted students in developing more structured and logical arguments. Several students reported that AI provided suggestions on how to organize ideas and arguments in their thesis, which ultimately improved the quality of their writing. Pita, one of the students, said, "AI provided suggestions on how to organize the ideas and arguments in my thesis. It really helped me in composing more structured and logical arguments."

However, some students also expressed the limitations of AI. While AI can provide technical feedback, it is not yet capable of providing in-depth conceptual guidance as a human lecturer can. Two students, Viana and Ihwang, stated, "AI is good for technical things, but I still need lecturer guidance for conceptual aspects and research methodology. AI cannot replace the lecturer's experience and knowledge."

The use of AI in thesis guidance also faces several challenges. One of the main challenges is the limited technological literacy among students. Some students feel less confident in using AI due to a lack of training and knowledge about the technology. Viana, stated, "I feel that AI is very useful, but I also feel less confident in using this technology. I need more training to be able to utilize AI to its full potential."

Students' practical experience of using AI also varied depending on the research topic and stage of the mentorship process. Some students reported that AI was very helpful in

the early stages of thesis writing, especially in outlining and literature search. However, at the stage of drafting chapters and analyzing data, students felt that they needed more guidance from lecturers to ensure that their interpretations and analyses were in line with academic standards.

Overall, the experience of students of UIN Jambi's Islamic Broadcasting Communication Study Program in using AI for thesis guidance shows that this technology has great potential to improve the efficiency and quality of thesis guidance. However, to maximize its benefits, it is necessary to increase technological literacy among students and lecturers, as well as develop adequate infrastructure. Thus, AI can be an effective tool in supporting the thesis guidance process and helping students achieve their maximum academic potential.

2. Lecturer Experience in Using AI

Lecturers who participated in this study also gave positive views on the use of AI in thesis guidance. They stated that AI helps reduce their workload by automating routine tasks such as correcting grammar and providing initial feedback on thesis drafts. This allows lecturers to focus on more in-depth and complex aspects of the guidance, such as discussing theory, methodology, and data interpretation. Agus, one of the lecturers, revealed, "AI helps me in identifying common mistakes that students often make. With this information, I can provide more focused and effective guidance. For example, if many students struggle with abstract writing, I can hold special guidance sessions on how to write a good abstract."

Lecturers report that AI helps reduce their workload, especially in routine tasks such as correcting grammar and providing early feedback on students' theses. Agus Salim also stated, "With AI, I no longer need to spend a lot of time correcting grammatical errors or writing formats. AI can already provide initial feedback, so I can focus on more important conceptual and methodological guidance."

In addition, AI assists lecturers in providing more personalized and structured guidance. With the help of AI, lecturers can identify the specific needs of each student based on data analysis generated by AI, so that guidance can be tailored to individual needs. Hafizen, another lecturer, said, "AI helps me to better understand the specific needs of each student. With the data provided by AI, I can provide more personalized and structured guidance."

AI also provides relevant and up-to-date literature recommendations, helping lecturers to enrich the references they provide to students. This is particularly useful in ensuring that students use sources that are up-to-date and relevant to their research topics. Hafiz, another lecturer, noted, "The literature recommendations from AI really help me in providing up-to-date references to students. It ensures that they are using relevant and up-to-date sources."

However, the lecturer also noted some challenges in using AI. One of the main challenges is the need for adequate technological literacy. Some lecturers felt less confident in using AI due to a lack of training and knowledge about the technology.

Junaidi, another lecturer, stated, "I feel AI is very useful, but I also feel less confident in using this technology. Training and technical support are needed to ensure that I can make the most of AI in thesis guidance." Overall, the experience of UIN Jambi Islamic Broadcasting Communication Study Program lecturers in using AI for thesis guidance shows that this technology has great potential to improve the efficiency and quality of guidance. However, to maximize its benefits, it is necessary to increase technological literacy among lecturers, as well as develop adequate infrastructure. Thus, AI can be an effective tool in supporting the thesis guidance process and helping lecturers and students achieve their maximum academic potential.

3. Challenges in AI Implementation

This research also identified some key challenges in the implementation of AI in thesis guidance. One of the biggest challenges is the readiness of technology infrastructure. Although UIN Jambi has made some efforts to improve the technological infrastructure, there are still some obstacles, such as unstable internet connection evenly distributed in the campus area and limited hardware. These conditions hinder the optimization of the use of AI in thesis guidance. A student, Eka, revealed, "Unstable internet connections often interfere with the use of AI. Sometimes I can't access the AI features because the network is slow or disconnected."

In addition, there are challenges related to data privacy and security. The use of AI requires the collection and analysis of student data, which raises concerns about data privacy and security. Some students and lecturers expressed concerns about how their data is stored and used. Herri, a lecturer, noted, "Data privacy and security are important issues. We need to ensure that student data is protected and used according to strict policies to maintain their trust."

To illustrate how AI can be applied in a real context, this research includes several case studies from students who have used AI in their thesis guidance process. One of the case studies describes the experience of a student who used AI to get automated feedback on his thesis draft. This student revealed that the AI helped correct grammatical errors and provided suggestions for improving sentence structure. However, the student also noted that AI could not provide guidance on how to construct a strong argument or choose the right methodology. Therefore, this student still relied on guidance from the lecturer for these aspects.

Another case study involved a lecturer who used AI to analyze common error patterns in students' thesis writing. This lecturer used the results of the AI analysis to design guidance sessions that were more focused on areas that needed improvement. For example, if many students had difficulty in writing a literature review, this lecturer would hold a special session on how to search and review literature effectively.

The implementation of AI in thesis guidance in the Islamic communication and broadcasting study program at UIN Jambi is expected to have a significant positive impact. First, AI can improve the quality of theses produced by students. With real-time feedback and relevant literature recommendations, students can improve their work quickly and access the right resources. Second, AI can reduce the workload of lecturers by

automating routine tasks, so that lecturers have more time to provide more in-depth guidance. Third, AI can provide emotional and motivational support to students. In thesis writing, students often experience stress and anxiety. AI can provide support in the form of advice and positive feedback, helping students stay motivated and focused on their goals.

4. Recommendations for Further Development

Based on the findings of this study, several recommendations are proposed for further development of the use of AI in thesis guidance at UIN Jambi's Islamic Communication and Broadcasting Study Program. First, it is important to improve technological literacy among lecturers and students. This can be done through trainings and workshops specifically designed to teach the use of AI in an academic context. This training should cover the technical aspects of AI use as well as the ethical principles associated with data use. Arfan stated, "Training and technical support are needed to ensure that I can maximally utilize AI in my thesis guidance."

Second, there needs to be investment in the development of technological infrastructure. UIN Jambi needs to ensure that a stable internet connection and adequate hardware are available to support the use of AI. In addition, it is important to develop an AI platform that is user-friendly and accessible to all lecturers and students. Student Niken revealed, "A stable internet connection often interferes with the use of AI. Sometimes I can't access the AI features due to a slow or broken network."

Third, data privacy and security policies should be strengthened. UIN Jambi should develop policies that ensure that student data is protected and used ethically. This includes transparency on how data is collected, stored, and used, as well as giving students control over their data. Two lecturers Herri and Ade noted, "Data privacy and security are important issues. We need to ensure that student data is protected and used in accordance with strict policies to maintain their trust."

Fourth, there is a need for a holistic approach to AI integration. AI should be seen as a support tool that complements, not replaces, human guidance. Therefore, it is important to maintain the personal interaction between lecturers and students. AI can be used to automate routine tasks and provide early feedback, while lecturers continue to provide conceptual and emotional guidance. Student Viona stated, "AI is good for technical things, but I still need lecturer guidance for conceptual aspects and research methodology. AI cannot replace lecturers' experience and knowledge."

In addition, research from Bates (2015) on Technology-Enhanced Learning (TEL) provides insight into how technology can be used to enhance the teaching and learning process. Bates emphasizes the importance of using online learning software and platforms to create interactive and adaptive learning experiences (Anggianita et al., 2020). This concept is relevant to the use of AI in thesis guidance, where AI can provide automated feedback and literature recommendations tailored to student needs.

Research from Grites (2013) on effective academic guidance is also an important reference. Grites emphasized key elements in academic guidance, such as collaboration,

personalization, and comprehensiveness (Sofiansyah et al., 2024) . By understanding these elements, this research can evaluate how AI can support and improve the thesis guidance process at UIN Jambi.

The utilization of AI in thesis guidance at UIN Jambi offers a range of significant benefits, including increased efficiency, personalization, and accessibility of guidance. Although there are challenges that need to be overcome, with the right strategy, AI can be integrated successfully in the thesis guidance process. A holistic approach, including training, infrastructure development, and strict privacy policies, is necessary to ensure effective and ethical implementation. Thus, AI can be a powerful tool to support lecturers and students in achieving their academic goals, as well as improving the quality of higher education in Indonesia. This research is expected to make a significant contribution in improving the effectiveness and efficiency of thesis guidance, as well as enriching the literature on the application of AI in higher education, particularly in the field of Islamic Communication and Broadcasting. With these steps, it is expected that the utilization of AI can improve the quality of thesis guidance and help students achieve their maximum academic potential.

D. CONCLUSIONS AND SUGGESTIONS

This study concludes that the utilization of Artificial Intelligence (AI) in the thesis guidance process at the Islamic Communication and Broadcasting Study Program of UIN Jambi has great potential to improve the effectiveness and efficiency of academic guidance. Through in-depth interviews with students and lecturers, it was found that AI provides various significant benefits, such as increased efficiency, personalized guidance, and reduced lecturer workload. AI helps speed up the thesis revision process by providing real-time feedback on grammatical and sentence structure errors, allowing students to correct errors quickly without having to wait for guidance from lecturers. In addition, AI provides relevant literature recommendations based on students' keywords and research topics, helping them find the right resources for their research, thereby improving research quality. The use of AI also automates routine tasks such as correcting grammar and providing initial feedback, allowing lecturers to focus on more in-depth guidance related to theory, methodology, and data interpretation, enabling them to provide more focused and effective guidance.

However, this study also identified several challenges that need to be addressed to maximize the potential of AI in thesis guidance. Limited technological literacy among lecturers is one of the main challenges, as some lecturers feel less confident in using AI due to lack of training and knowledge about the technology. Therefore, training and technical support are necessary to ensure that lecturers can utilize AI effectively.

Based on these findings, this study recommends several steps for further development of AI utilization in thesis guidance at UIN Jambi's Islamic Communication and Broadcasting Study Program. Increased technology training is essential to ensure lecturers and students have the necessary knowledge and skills to use AI effectively. Technology infrastructure development is also needed to provide stable internet connection and adequate hardware. In addition, privacy and data security policies should be strengthened to ensure that student

data is protected and used ethically. With a holistic approach that includes training, infrastructure development, and strict privacy policies, AI can be effectively integrated to support the thesis guidance process, improve the quality of higher education in Indonesia, and help students reach their full academic potential. This research contributes to the literature on the application of AI in higher education, particularly in the field of Islamic Communication and Broadcasting, and is expected to serve as a basis for further development in this field.

ACKNOWLEDGMENTS

The authors would like to express their sincere gratitude to the Department of Islamic Communication and Broadcasting, Faculty of Da'wah and Communication, Universitas Islam Negeri (UIN) Sulthan Thaha Saifuddin Jambi for providing institutional support and academic facilities throughout the duration of this research. Special appreciation is extended to all the final-year undergraduate students and faculty advisors who generously contributed their time, insights, and valuable reflections during the in-depth interview sessions. We also extend our thanks to the academic peers and reviewers whose constructive feedback greatly enriched the quality and rigor of this manuscript.

REFERENCES

- 1a, A., Kartiko, A., Puspita, Y., Mutiara, S., Informatika, I., Darmajaya, B., & Id, A. A. (2023). Rancang Bangun Aplikasi Bimbingan Skripsi Online Berbasis Mobile. *Prosiding Seminar Nasional Darmajaya*, 1(0), 5–14. <https://jurnal.darmajaya.ac.id/index.php/PSND/article/view/3819>
- Aithal, P. S., & Aithal, S. (2023). Optimizing the use of artificial intelligence-powered GPTs as teaching and research assistants by professors in higher education institutions: A study on smart utilization. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 8(4), 368–401.
- Anggianita, S., Yusnira, Y., & Rizal, M. S. (2020). Persepsi Guru terhadap Pembelajaran Daring di Sekolah Dasar Negeri 013 Kumantan. *Journal of Education Research*, 1(2), 177–182. <https://doi.org/10.37985/JOE.V1I2.18>
- Assyakurrohim, D., Sirodj, R. A., Afgani, W., Raden, U., & Palembang, F. (2023). Metode Studi Kasus dalam Penelitian Kualitatif. *Jurnal Pendidikan Sains Dan Komputer*, 3(01), 1–9. <https://doi.org/10.47709/JPSK.V3I01.1951>
- Ayeni, O. O., Al Hamad, N. M., Chisom, O. N., Osawaru, B., & Adewusi, O. E. (2024). AI in education: A review of personalized learning and educational technology. *GSC Advanced Research and Reviews*, 18(2), 261–271.
- Darwin, D. (2025). Collaboration In Teaching: The Role Of Teachers, Students, And Technology In Effective Learning. *MSJ: Majority Science Journal*, 3(3), 252–258.
- Dewi, M. A., Irham, R., Raya, S., 58, N., Pesanggrahan, U., & Selatan, J. (2021). Penerapan Agile Scrum Pada Pengembangan Aplikasi Bimbingan Daring Skripsi Mahasiswa. *Jurnal SISKOM-KB (Sistem Komputer Dan Kecerdasan Buatan)*, 4(2), 40–45. <https://doi.org/10.47970/SISKOM-KB.V4I2.195>
- Fadhilah, N., Saleh, R., & Azman, Z. (2022). PERSEPSI MAHASISWA TERHADAP KOMUNIKASI ANTARPRIBADI DOSEN PEMBIMBING DAN MAHASISWA DALAM BIMBINGAN SKRIPSI. *Jurnal Ilmiah Mahasiswa Fakultas Ilmu Sosial & Ilmu Politik*, 7(1). <https://jim.usk.ac.id/FISIP/article/view/19210>

- Felemban, H., Sohail, M., & Ruikar, K. (2024). Exploring the readiness of organisations to adopt artificial intelligence. *Buildings*, 14(8), 2460.
- Garg, P. K. (2021). *Overview of artificial intelligence*. Chapman & Hall: London, UK.
- Goel, A. K., & Polepeddi, L. (2018). Jill Watson : A Virtual Teaching Assistant for Online Education. *Learning Engineering for Online Education*, 120–143. <https://doi.org/10.4324/9781351186193-7>
- Hidayah, N. (2023). Tantangan dan Strategi Pengajar dalam Menyikapi Perkembangan Teknologi Artificial Intelligence (AI), Study Kasus pada Mahasiswa Keperawatan dalam Penyelesaian Tugas Akhir. *Prosiding Seminar Nasional Pascasarjana*, 6(1), 552–555. <https://proceeding.unnes.ac.id/snpasca/article/view/2181>
- Kamruzzaman, M. M., Alanazi, S., Alruwaili, M., Alshammari, N., Elaiwat, S., Abu-Zanona, M., Innab, N., Mohammad Elzaghmouri, B., & Ahmed Alanazi, B. (2023). AI-and IoT-assisted sustainable education systems during pandemics, such as COVID-19, for smart cities. *Sustainability*, 15(10), 8354.
- 1a, A., Kartiko, A., Puspita, Y., Mutiara, S., Informatika, I., Darmajaya, B., & Id, A. A. (2023). Rancang Bangun Aplikasi Bimbingan Skripsi Online Berbasis Mobile. *Prosiding Seminar Nasional Darmajaya*, 1(0), 5–14. <https://jurnal.darmajaya.ac.id/index.php/PSND/article/view/3819>
- Aithal, P. S., & Aithal, S. (2023). Optimizing the use of artificial intelligence-powered GPTs as teaching and research assistants by professors in higher education institutions: A study on smart utilization. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 8(4), 368–401.
- Anggianita, S., Yusnira, Y., & Rizal, M. S. (2020). Persepsi Guru terhadap Pembelajaran Daring di Sekolah Dasar Negeri 013 Kumantan. *Journal of Education Research*, 1(2), 177–182. <https://doi.org/10.37985/JOE.V1I2.18>
- Assyakurrohim, D., Sirodj, R. A., Afgani, W., Raden, U., & Palembang, F. (2023). Metode Studi Kasus dalam Penelitian Kualitatif. *Jurnal Pendidikan Sains Dan Komputer*, 3(01), 1–9. <https://doi.org/10.47709/JPSK.V3I01.1951>
- Ayeni, O. O., Al Hamad, N. M., Chisom, O. N., Osawaru, B., & Adewusi, O. E. (2024). AI in education: A review of personalized learning and educational technology. *GSC Advanced Research and Reviews*, 18(2), 261–271.
- Darwin, D. (2025). Collaboration In Teaching: The Role Of Teachers, Students, And Technology In Effective Learning. *MSJ: Majority Science Journal*, 3(3), 252–258.
- Dewi, M. A., Irham, R., Raya, S., 58, N., Pesanggrahan, U., & Selatan, J. (2021). Penerapan Agile Scrum Pada Pengembangan Aplikasi Bimbingan Daring Skripsi Mahasiswa. *Jurnal SISKOM-KB (Sistem Komputer Dan Kecerdasan Buatan)*, 4(2), 40–45. <https://doi.org/10.47970/SISKOM-KB.V4I2.195>
- Fadhilah, N., Saleh, R., & Azman, Z. (2022). PERSEPSI MAHASISWA TERHADAP KOMUNIKASI ANTARPRIBADI DOSEN PEMBIMBING DAN MAHASISWA DALAM BIMBINGAN SKRIPSI. *Jurnal Ilmiah Mahasiswa Fakultas Ilmu Sosial & Ilmu Politik*, 7(1). <https://jim.usk.ac.id/FISIP/article/view/19210>
- Felemban, H., Sohail, M., & Ruikar, K. (2024). Exploring the readiness of organisations to adopt artificial intelligence. *Buildings*, 14(8), 2460.
- Garg, P. K. (2021). *Overview of artificial intelligence*. Chapman & Hall: London, UK.
- Goel, A. K., & Polepeddi, L. (2018). Jill Watson : A Virtual Teaching Assistant for Online Education. *Learning Engineering for Online Education*, 120–143. <https://doi.org/10.4324/9781351186193-7>
- Hidayah, N. (2023). Tantangan dan Strategi Pengajar dalam Menyikapi Perkembangan Teknologi Artificial Intelligence (AI), Study Kasus pada Mahasiswa Keperawatan dalam

Penyelesaian Tugas Akhir. *Prosiding Seminar Nasional Pascasarjana*, 6(1), 552-555.
<https://proceeding.unnes.ac.id/snpasca/article/view/2181>

Kamruzzaman, M. M., Alanazi, S., Alruwaili, M., Alshammari, N., Elaiwat, S., Abu-Zanona, M., Innab, N., Mohammad Elzaghmouri, B., & Ahmed Alanazi, B. (2023). AI-and IoT-assisted sustainable education systems during pandemics, such as COVID-19, for smart cities. *Sustainability*, 15(10), 8354.