

Analysis of PAI Students' Readiness for the Integration of Artificial Intelligence in Learning at Ahmad Dahlan University

Saukina Salsabila Putri ¹, Arif Rahman²

^{1,2} Islamic Religious Education Ahmad Dahlan University
*2300031071@webmail.uad.ac.id

ARTICLE INFO

Article history

Received June 16, 2026

Revised July 27, 2026

Accepted August 13, 2026

Keywords: Artificial Intelligence, Islamic Education, Student Readiness, Digital Literacy, Academic Ethics

ABSTRACT

The rapid advancement of the digital era has accelerated the integration of Artificial Intelligence (AI) into higher education, including the learning process in the Islamic Religious Education (PAI) Study Program at Universitas Ahmad Dahlan. AI offers significant opportunities to improve learning effectiveness, yet its successful implementation depends on students' readiness to use it responsibly and effectively. This study aims to analyze the readiness of PAI students for the integration of AI in learning by examining their understanding, perceptions, and ability to utilize AI as an academic support tool. An explanatory sequential approach was employed, with data collected through classroom observations, in-depth interviews with PAI students, and documentation of AI-assisted learning activities. The findings indicate that most PAI students have positive perceptions and are receptive to the use of AI, particularly for conducting literature searches, completing academic assignments, and enhancing conceptual understanding. However, their readiness has not yet reached an optimal level due to limited digital literacy, insufficient understanding of academic ethics, and concerns about excessive dependence on AI. The study concludes that PAI students are generally prepared to integrate AI into learning, provided that digital competencies, ethical awareness, and Islamic values are continuously strengthened to ensure the responsible and meaningful use of AI in Islamic education.

1. INTRODUCTION

The incorporation of Artificial Intelligence (AI) tools within the educational sector has emerged as a worldwide issue over the past ten years. Multiple global research findings indicate that universities encounter considerable obstacles in equipping students who can effectively comprehend academic material while also possessing the flexibility to adapt to the swift advancements in digital technology. In this context, the use of AI in the learning process is no longer just a technological innovation, but a strategic need to improve efficiency, personalisation, and the quality of the student learning experience. (Xia et al., 2024). In Indonesia, particularly at Islamic Religious Universities (PTKI), the preparedness of students to engage with AI integration remains a significant concern. Various studies indicate that numerous students experience challenges with digital literacy, the capacity to critically analyze technology-driven information, and the adjustment to learning approaches that incorporate AI. This condition has an impact on the effectiveness of the use of AI in learning, so an educational strategy is needed that is able to combine mastery of technology with strengthening academic competence and Islamic values (Safwandi, n.d.). The incorporation of artificial intelligence in education at PTKI poses a twofold challenge. Firstly, this technology provides prospects for enhancing the customization of learning experiences, analyzing educational data, and obtaining information promptly. Conversely, PTKI is tasked with fostering academic skills while embedding Islamic principles as the core of student development. Therefore, AI-based learning design needs to be adapted to the context of Islamic education so that technology is not only a tool, but also a means of meaningful and ethical learning (Gama et al., 2025). Based on this description, the problems in this study are: (1) how is the level of readiness of students of the Faculty of Islamic Religion (FAI) in facing the integration of AI in learning, and (2) what aspects affect this readiness, both in terms of cognitive, affective, and technical. In line with that, the purpose of this study is to analyze the level of readiness of FAI students for AI integration and identify the

factors that affect it in the context of Islamic value-based learning(Rapi & Rusdi, 2024). This study uses the mixed methods With design Explanatory Sequential, which combines quantitative and qualitative data to obtain a comprehensive picture of student readiness. The analysis was carried out on aspects of technological capabilities, attitudes towards digital innovation, and perceptions of the relevance of AI in supporting Islamic value-based learning(Studies, 2025). The novelty of this research lies in a holistic approach in assessing the readiness of PAI students for AI integration, which not only focuses on technical aspects, but also pays attention to alignment with Islamic values. This research is expected to provide practical implications in the development of AI-based learning models that are able to support academic competence, digital literacy, and Islamic character formation simultaneously(Mujahid et al., 2024).

2. METHODS

This study employed a mixed methods approach using a sequential explanatory design, which integrates quantitative and qualitative methods to obtain a comprehensive understanding of students' readiness for the integration of Artificial Intelligence (AI) in learning(Khoirawati et al., 2025). The research was conducted in two consecutive stages. The first stage involved a quantitative survey to measure students' readiness levels, while the second stage consisted of qualitative interviews to further explain and strengthen the quantitative findings(Kori et al., 2026). The study was conducted at the Islamic Religious Education (PAI) Study Program, Faculty of Islamic Studies, Ahmad Dahlan University, Yogyakarta, Indonesia. The research population comprised active undergraduate students enrolled in the PAI Study Program during the 2025/2026 academic year. The quantitative data were collected using a structured questionnaire distributed through Google Forms. The questionnaire consisted of closed-ended items measured on a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). In addition, several open-ended questions were included to capture students' perceptions regarding the benefits, challenges, and readiness for AI implementation in learning. The qualitative data were collected through semi-structured in-depth interviews conducted from May 17 to May 20, 2026, both online and offline at Ahmad Dahlan University or other mutually agreed locations. The interviews aimed to explore students' experiences, perceptions, expectations, and concerns regarding the integration of AI into higher education learning. Quantitative data were analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation. The results were subsequently categorized into low, moderate, and high levels of AI readiness. Qualitative data were analyzed using thematic analysis through the processes of data reduction, data coding, theme identification, data display, and conclusion drawing. The qualitative findings were then integrated with the quantitative results to provide a more comprehensive interpretation of students' readiness. The operational variables examined in this study consisted of five dimensions of AI readiness: (1) technical readiness, referring to students' ability to operate AI-based applications and digital technologies; (2) cognitive readiness, referring to students' understanding and critical use of AI in academic contexts; (3) attitudes toward AI, referring to students' positive or negative perceptions of AI implementation in learning; (4) institutional support, referring to the availability of university facilities, infrastructure, and policies supporting AI utilization; and (5) ethical awareness, referring to students' understanding of ethical principles, academic integrity, privacy, and responsible AI use(Jo, 2021).

3. RESULTS AND DISCUSSION

RESULTS

3.1 Overall Student Readiness for AI Integration

Drawing from the quantitative analysis paired with qualitative insights, the findings reveal that students studying at the Faculty of Islamic Studies (FAI) at Universitas Ahmad Dahlan generally exhibit a considerable readiness for the incorporation of Artificial Intelligence (AI) into their education. The analyzed questionnaire data shows that 98.4% of participants regularly engage with digital tools for their studies, 94.4% are aware of AI applications used in learning, 93.6% have applied AI to assist with their academic projects, and 89.6% expressed they can independently learn AI technologies. Nevertheless, only 50.4% of students reported a strong readiness to effectively incorporate AI into their educational process, indicating that practical application is still limited despite high familiarity with technology. Table 1 provides a summary of the overall student readiness profile for AI integration.

Table 1. Student Readiness Profile for AI Integration

Readiness Dimension	Category	Percentage	Interpretation
Technical Readiness	High	98.4%	Excellent access to and use of digital technology
Attitude toward AI	High	94.4%	Positive acceptance of AI in learning
Implementation Readiness	Moderate	50.4%	AI has not been optimally integrated into learning activities
Cognitive Readiness	Moderate	65%	Conceptual understanding of AI varies among students
Adaptability	Moderate	65%	Students adapt differently to AI-supported learning
Institutional Support	Moderate	60%	Institutional support remains limited
Ethical Awareness	High	84%	Strong awareness of academic integrity

As illustrated in Table 1, technical readiness attained the highest figure at 98.4%, signifying that almost all participants have adequate access to digital technologies and are adept at employing them for educational purposes. Enthusiastic views on AI also reached a notable figure of 94.4%, highlighting a wide acceptance of learning that is supported by AI. In contrast, the readiness for implementation was significantly lower, standing at 50.4%, which denotes that merely half of the respondents feel completely equipped to incorporate AI into their learning approaches. The results additionally indicate that students' cognitive readiness reached 65%, suggesting that most respondents possess practical skills in using AI but still have only a moderate conceptual understanding of its underlying principles. Likewise, adaptability was recorded at 65%, indicating that students demonstrate a moderate ability to adjust to AI-supported learning environments. Institutional support reached 60%, showing that universities have begun supporting AI integration, although further improvements in curriculum development, lecturer guidance, and infrastructure are still needed. Meanwhile, ethical awareness remained high at 84%, reflecting students' strong commitment to maintaining academic integrity when using AI.

3.2 Institutional Support for AI Integration

The quantitative findings indicate that institutional support for AI integration is still developing. Although students have begun to utilize AI in their academic activities, the implementation of AI within the institutional learning environment has not yet been fully established. The processed data show moderate levels of curriculum integration, lecturer support, and institutional facilities. The results are summarized in Table 2.

Table 2. Institutional Support for AI Integration

Appearance	Category	Percentage	Interpretation
AI Utilization in Academic Tasks	Moderate	60%	AI is used individually rather than systematically
Curriculum Integration	Moderate	55%	AI has not been formally integrated into the curriculum
Lecturer Support	Moderate	60%	Guidance from lecturers remains limited
Institutional Facilities	Moderate	60%	Infrastructure requires further development

As presented in Table 2, the application of AI in educational tasks has attained 60%, highlighting that learners are already utilizing AI resources to finish their assignments. Nonetheless, the integration of AI into the curriculum stands at 55%, implying that AI has yet to be recognized as an official element of teaching activities. Support from lecturers also reached 60%, indicating average levels of academic assistance concerning AI usage. Reports of institutional resources fell between 55 and 65%, signifying that the current

infrastructure is sufficient but still requires further improvement. In summary, the results reveal that the readiness of institutions has not kept up with that of students on an individual basis. While the use of AI by students is on the rise, the mechanisms within institutions that facilitate its organized implementation are still lacking.

3.3 Students' Cognitive Readiness toward AI Integration

The findings show differences in students' mental preparedness for incorporating AI. Although a majority of participants claimed they could utilize AI tools for educational tasks, their grasp of AI concepts varied significantly. Table 3 displays how students' cognitive readiness is distributed.

Table 3. Distribution of Students' Cognitive Readiness

Cognitive Readiness Level	Percentage	Interpretation
High	25%	Strong conceptual understanding of AI
Moderate	65%	Practical understanding with limited conceptual knowledge
Low	10%	Limited understanding of AI concepts and applications

As presented in Table 3, the majority of respondents (65%) were classified in the moderate category, indicating that most students are capable of using AI tools but possess only a moderate conceptual understanding of how AI functions. Approximately 25% of students demonstrated high cognitive readiness, suggesting both practical competence and deeper conceptual knowledge of AI. Meanwhile, 10% of respondents were categorized as having low cognitive readiness, indicating limited familiarity with AI concepts and applications. These findings suggest that although most students are able to utilize AI effectively, their theoretical understanding still requires further improvement. Figure 1 illustrates the distribution of students' cognitive readiness toward AI integration. The largest proportion of students falls within the moderate readiness category (65%), followed by the high readiness category (25%) and the low readiness category (10%). This distribution indicates that although most students are able to use AI effectively in learning activities, only a smaller proportion demonstrates advanced conceptual understanding of AI. Therefore, strengthening AI literacy through structured educational programs remains necessary.

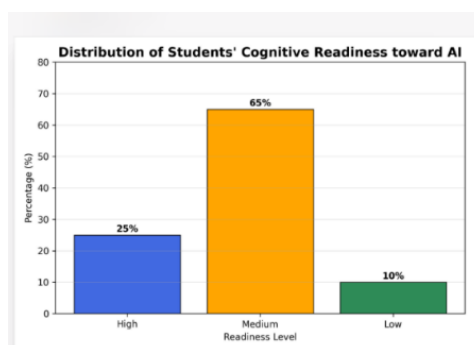


Figure 1. Distribution of Students' Cognitive Readiness to AI

The diagram illustrates that the largest share of students falls into the medium range (65%), with the high range at 25% and the low range at 10%. This prevalence suggests that while a significant number of students can apply AI in practical situations, they lack a profound grasp of the underlying concepts. Additionally, the segment classified as high demonstrates that there is a portion of students who possess superior AI knowledge, whereas the low segment indicates an ongoing requirement for educational support to enhance foundational knowledge of AI. This discrepancy highlights an existing deficit in AI understanding that may influence the effectiveness of technology in education. Consequently, the inclusion of AI literacy within the educational framework is necessary to meet the demands of 21st-century skills. These outcomes align with research findings that reveal AI has the potential to stimulate cognitive development, enhancing students' critical and analytical reasoning abilities when applied thoughtfully. Nonetheless, without sufficient understanding, the application of AI risks being merely technical and failing to achieve its full potential (Southworth et al., 2023).

3.4 Students' Perceived Benefits of AI in Learning

The numerical and descriptive results suggest that students typically view Artificial Intelligence (AI) as an important asset for aiding in educational tasks. A majority of participants indicated that AI aids in obtaining scholarly information, boosts understanding of educational content, and increases learning efficiency. The quantitative findings can be found in Table 4.

Table 4. Students' Perceived Benefits of AI in Learning

Appearance	Percentage	Interpretation
Finding academic references	85–95%	AI improves the efficiency of information retrieval
Understanding learning materials	80–90%	AI facilitates comprehension of complex topics
Learning productivity	75–85%	AI supports faster and more efficient learning

As indicated in Table 4, around 85% to 95% of participants expressed that AI aids them in finding academic sources with greater efficiency. Roughly 80% to 90% shared that AI supports their comprehension of educational documents, especially difficult ideas. Additionally, between 75% and 85% of learners mentioned that AI enhances their academic productivity by allowing them to finish educational assignments more effectively. In addition to the numerical data, qualitative interviews took place to explore students' views more thoroughly. The findings from these interviews are compiled in Table 5.

Table 5. Qualitative Findings on Students' Perceptions of AI

Theme	Description	Representative Response
Efficiency	AI accelerates information retrieval	"AI makes it easier to find academic references."
Understanding	AI facilitates comprehension of difficult materials	"AI helps me understand difficult topics more easily."
Productivity	AI increases learning efficiency	"Learning becomes faster and more effective."

The qualitative findings indicate that students consistently perceive AI as beneficial for improving learning efficiency, supporting comprehension, and increasing academic productivity. These findings complement the quantitative results by providing direct evidence of students' experiences with AI-supported learning. Overall, the results demonstrate that students hold positive perceptions regarding the educational benefits of AI.

3.5 Students' Ethical Concerns Regarding AI Utilization

While learners typically showed favorable views on AI, the results also indicate recognition of multiple ethical concerns associated with its application in higher education. Participants voiced worries about cheating, over-reliance on AI technologies, and the significance of upholding academic honesty. The numerical results are shown in Table 6.

Table 6. Students' Ethical Concerns Regarding AI

Ethical Aspect	Percentage	Interpretation
Concern about AI misuse	76.8%	Most students recognize the potential risks of AI misuse
Importance of academic integrity	84.0%	Strong awareness of academic honesty
Need for AI regulations	64.8%	Students expect institutional guidance and regulations

As shown in Table 6, roughly 76.8% of participants raised alarms about the possible abuse of AI in educational settings. Furthermore, 84% highlighted the significance of upholding integrity in academics when utilizing AI tools. Approximately 64.8% of those surveyed pointed out that formal rules from institutions are essential to steer the appropriate application of AI within higher education. The qualitative results additionally reflect students' ethical worries and are compiled in Table 7.

Table 7. Qualitative Findings on Ethical Concerns

Theme	Description	Representative Response
Plagiarism	Potential misuse of AI for academic assignments	"AI can easily be misused when completing assignments."
Dependency	Excessive reliance on AI	"I am worried that students may become too dependent on AI."
Academic Integrity	Decline in independent thinking and honesty	"AI may reduce students' academic honesty."

The interview findings indicate that students are aware of the ethical challenges associated with AI use. Concerns regarding plagiarism, dependency, and academic integrity emerged consistently across respondents, complementing the quantitative findings. Overall, the results demonstrate that students recognize both the benefits and the ethical challenges of AI utilization in academic settings.

3.6 Students' Need for AI Regulations and Lecturer Support

The findings indicate that students expect stronger institutional support for AI integration through formal regulations, lecturer guidance, and curriculum development. Respondents emphasized that effective AI implementation requires not only access to technology but also structured academic support. The quantitative findings are summarized in Table 8.

Table 8. Students' Needs for Institutional Support in AI Integration

Appearance	Percentage	Interpretation
Need for AI regulations	64.8%	Students expect clear institutional policies
Lecturer guidance	80–90%	Students require guidance in responsible AI use
Curriculum integration	75–85%	Students support formal AI integration into the curriculum

As shown in Table 8, approximately 64.8% of respondents emphasized the need for institutional regulations governing AI utilization in higher education. Between 80% and 90% of respondents indicated that lecturers should provide guidance regarding appropriate AI use in learning activities. Furthermore, between 75% and 85% believed that AI should be formally incorporated into the curriculum to support systematic learning. Qualitative interview findings provide additional insights into students' expectations and are summarized in Table 9.

Table 9. Qualitative Findings on Institutional Support

Theme	Description	Representative Response
Regulation	Need for institutional policies	"Clear regulations regarding AI use are necessary."
Lecturer Guidance	Need for academic supervision	"Lecturers should guide students in using AI appropriately."
Curriculum Integration	Formal AI education	"AI should become part of the university curriculum."

The interview findings consistently indicate that students expect universities to establish clear regulations, provide lecturer guidance, and integrate AI into formal learning activities. These qualitative findings support the quantitative results and provide a more comprehensive understanding of students' expectations regarding institutional support. Overall, the findings suggest that students consider institutional policies, lecturer guidance, and curriculum development to be important components of successful AI integration in higher education.

DISCUSSION

Student Readiness for AI Integration in Higher Education

The findings indicate that students of the Faculty of Islamic Studies (FAI), Universitas Ahmad Dahlan, generally demonstrate a high level of readiness for Artificial Intelligence (AI) integration in learning. High levels of technical readiness (98.4%) and positive attitudes toward AI (94.4%) suggest that most students are familiar with digital technologies and are willing to adopt AI to support their academic activities. These findings imply that AI has become an integral part of students' learning experiences rather than merely an

emerging technological innovation. The results support the concept of Technology Acceptance Model (TAM) proposed by Fred Davis, which explains that users are more likely to adopt technology when they perceive it as useful and easy to use. Students' positive attitudes and frequent use of AI indicate that both perceived usefulness and perceived ease of use contribute significantly to AI acceptance within higher education. Nevertheless, despite students showing a high level of technical preparedness, their readiness for implementation is significantly lower at 50.4%. This indicates that mere proficiency in technology does not ensure effective integration into educational frameworks. While students may have satisfactory digital skills, they still need pedagogical support and well-organized learning settings to effectively employ AI for their studies. These results align with earlier research indicating that college students generally show a positive attitude toward AI technologies but still face difficulties with implementation, institutional preparedness, and pedagogical integration. Rather than operating in isolation, the effective incorporation of AI relies on the interplay between technological ability, learning design, and institutional backing. From a theoretical standpoint, this research broadens the current dialogue on AI readiness by illustrating that it should not be regarded exclusively from a technological angle. Instead, AI readiness includes a combination of technical, cognitive, pedagogical, ethical, and institutional aspects that together influence the successful incorporation of technology in higher education.

Institutional Readiness as a Determining Factor for AI Integration

One of the key discoveries from this research is the gap between the preparedness of students and that of the institutions. Although students indicated they were using AI extensively, aspects such as curriculum incorporation, lecturer assistance, and institutional resources were only at average levels. This disparity suggests that educational organizations have not adequately adjusted to the swift advancements in AI technology. This conclusion reinforces the idea of organizational readiness for change, highlighting that the shift in technology necessitates a commitment from the institution alongside the skills of individuals. For educational innovation to thrive, it cannot rely merely on the efforts of students; it demands thorough institutional approaches that include leadership, curriculum enhancement, infrastructure, and policy application. (New, 2025). The moderate level of curriculum integration suggests that AI is currently used primarily as an individual learning tool rather than as an officially integrated instructional resource. Similarly, lecturer support remains limited, indicating that many instructors are still adapting to AI-assisted teaching practices. Similar results have been observed in earlier research indicating that higher education institutions often face a disparity between swift technological growth and gradual institutional changes. Although students may embrace AI on their own, the updating of policies, course content, and training programs for educators tends to fall behind technological advancements. These observations imply that effective incorporation of AI necessitates that universities create supportive policies, overhaul academic programs, enhance digital resources, and offer ongoing training for instructors. In the absence of these facilitative frameworks, the technological preparedness of students cannot be converted into valuable educational results (Luo & James, 2026).

Cognitive Readiness and AI Literacy

Despite the majority of participants showing hands-on experience with AI tools, the findings indicated that their cognitive readiness is only moderate. A large number of students can effectively employ AI resources for their studies; however, only a limited segment has a thorough grasp of AI concepts, constraints, and ethical considerations. This outcome underscores the difference between practical AI literacy and an analytical understanding of AI (Syukur et al., 2023). Functional literacy refers to the ability to operate AI applications effectively, whereas critical literacy involves understanding how AI systems generate information, recognizing their limitations, evaluating output quality, and applying AI responsibly. The dominance of moderate cognitive readiness indicates that students have largely achieved functional literacy but have not yet reached advanced levels of critical AI literacy (Cern, 2024). Consequently, many students may rely on AI-generated information without sufficiently evaluating its credibility, accuracy, or potential bias. These findings correspond with previous research emphasizing that AI literacy should extend beyond technical competence to include analytical thinking, ethical reasoning, digital literacy, and information evaluation skills. Universities therefore need to incorporate AI literacy into formal learning activities rather than assuming that students will develop these competencies independently. From a theoretical perspective, the results reinforce the importance of

integrating AI literacy into twenty-first-century competencies, alongside critical thinking, creativity, collaboration, and digital literacy. Developing these competencies will enable students to use AI not merely as consumers of technology but as reflective and responsible learners(Cox & Cox, 2024).

Ethical Issues in AI Utilisation

The findings reveal that although students generally have positive perceptions of AI, they are also aware of the ethical challenges associated with its use in academic settings. More than three-quarters of the respondents expressed concerns regarding the misuse of AI, while a large majority emphasized the importance of maintaining academic integrity. These findings demonstrate that students recognize AI as both a valuable educational resource and a technology that requires responsible and ethical use. Ethical concerns primarily involve plagiarism, excessive dependence on AI, reduced independent thinking, and the potential dissemination of inaccurate information. These concerns are consistent with the principles of Responsible Artificial Intelligence, which emphasize transparency, accountability, fairness, and human oversight in AI implementation. Within higher education, AI should function as a learning support tool rather than a substitute for students' intellectual engagement(Foltynek et al., 2023). The qualitative findings further reinforce this perspective. Students expressed concerns that unrestricted AI use could encourage academic dishonesty and reduce critical thinking skills. Such perceptions indicate that students are aware of the limitations of AI and understand the importance of balancing technological assistance with independent learning. These findings are consistent with previous studies reporting that ethical considerations have become one of the major challenges in educational AI implementation. Researchers have emphasized that the successful integration of AI depends not only on technological capability but also on the establishment of ethical guidelines that preserve academic integrity and encourage responsible digital citizenship(Gachulinec, 2026). Therefore, universities should formulate comprehensive ethical policies governing AI utilization. Such policies should provide clear guidance regarding acceptable AI use, citation practices, academic honesty, data privacy, and students' responsibilities when employing AI-assisted learning tools.

Comparison with Previous Studies

The findings of this study generally support previous research indicating that university students demonstrate positive attitudes toward AI and increasingly utilize AI technologies in academic activities. Similar studies have reported that AI contributes to improving learning efficiency, facilitating information retrieval, and supporting students in completing academic assignments. However, this study also identifies several distinctive findings(Caspari-Sadeghi, 2026). While earlier studies primarily focused on students' acceptance of AI, the present research demonstrates that high technological readiness does not necessarily translate into successful educational implementation. Students may possess sufficient technical skills, yet institutional support, curriculum integration, lecturer guidance, and AI literacy remain underdeveloped. Furthermore, previous research has often examined technological acceptance independently from institutional readiness. In contrast, this study highlights the interaction among individual readiness, institutional support, ethical awareness, and cognitive readiness as complementary dimensions influencing AI integration in higher education. These findings suggest that AI readiness should be understood as a multidimensional construct encompassing technological competence, pedagogical readiness, institutional capacity, ethical awareness, and AI literacy. Consequently, future studies should adopt more comprehensive frameworks for evaluating AI implementation within higher education institutions(Caspari-Sadeghi, 2026).

Theoretical Implications

This study adds to the increasing understanding of how Artificial Intelligence is being used in higher education by looking at student readiness in a broader way, not just focusing on their ability to use technology. The results show that effectively using AI requires several connected factors like being ready with the right technology, having the right mindset, getting support from the organization, understanding ethics, and having a good attitude toward AI. The study backs up the Technology Acceptance Model (TAM) by showing that students' views on how useful and easy a technology is help shape their positive attitude toward AI. Even though the results show that people accept technology, it's not enough on its own for educational programs to work well (Rusli Akhmad Junaedi, 2025). Institutional readiness, curriculum design, lecturer competence, and AI literacy represent additional determinants that influence sustainable AI integration(Umaya et al., 2026). Accordingly, this research proposes that AI readiness should be conceptualized as a holistic educational

construct rather than merely a technological indicator. This perspective enriches current theoretical discussions by integrating technological, pedagogical, organizational, and ethical dimensions into a comprehensive framework for AI adoption in higher education. The study also contributes to discussions on digital literacy by demonstrating that functional AI use should be accompanied by critical AI literacy. Students must not only know how to use AI applications but also understand their underlying principles, evaluate generated information critically, and apply AI responsibly within academic environments (Education, 2026).

Practical Implications and Proposed AI Integration Model

The practical implications of this study highlight the importance of institutional strategies for optimizing AI integration in higher education. Although students demonstrate high technological readiness, universities should develop comprehensive policies to ensure that AI is implemented systematically and responsibly (Rusli Akhmad Junaedi, 2025). First, universities should establish institutional regulations governing AI utilization in academic activities. Clear policies can help prevent academic misconduct while promoting responsible AI use among students and lecturers. Second, AI literacy should be integrated into the curriculum as part of digital competency development. Formal instruction can improve students' conceptual understanding of AI, ethical awareness, critical thinking, and information evaluation skills, enabling them to become responsible users of AI technologies. Third, continuous professional development programs should be provided for lecturers to enhance their competence in designing AI-supported learning activities (Dabis & Csáki, 2024). Lecturers play a central role in facilitating responsible AI use, integrating AI into instructional strategies, and guiding students in critically evaluating AI-generated information. Finally, universities should strengthen digital infrastructure and establish institutional support systems that facilitate sustainable AI implementation (Anggi Fatmadiwi et al., 2025). Effective AI integration requires close collaboration among university leaders, lecturers, students, curriculum developers, and information technology units. Based on the overall findings, this study proposes a holistic model of AI integration in higher education. The model begins with students' technical readiness and positive attitudes toward AI as foundational elements. These factors should be supported by institutional policies, curriculum integration, lecturer guidance, AI literacy development, and ethical regulations (Intensity et al., 2023). Through the interaction of these components, AI can contribute to creating adaptive, student-centered, ethically responsible, and sustainable learning environments. Overall, the findings indicate that successful AI integration requires a balanced combination of technological readiness, institutional commitment, pedagogical innovation, cognitive development, and ethical responsibility (Firda Laila Syahda et al., 2024). Universities that address these dimensions simultaneously are more likely to achieve meaningful and sustainable AI-enhanced education.

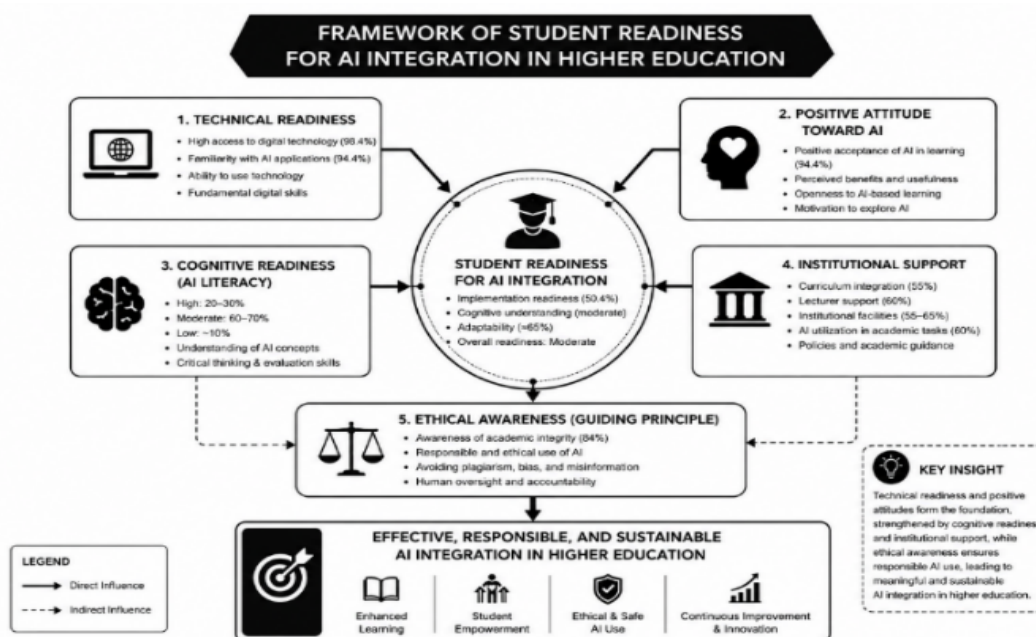


Figure 2. Conceptual Framework of student readiness for AI

4. CONCLUSION

The study shows that students from the Faculty of Islamic Religion have different levels of preparedness when it comes to dealing with the use of Artificial Intelligence in their learning, especially in terms of their thinking, feelings, and technical skills. Students usually have a good understanding of technology and are open to using AI, but their readiness in terms of thinking and learning with AI is only average. Students who are comfortable with using technology usually find it easier to adjust to AI and use it well to help with their learning. In addition, using AI also helps build skills like critical thinking, thinking about your own thinking, and being aware of ethics, which match with Islamic values. So, using AI can be a smart way to help improve the academic skills of FAI students, while also helping them develop a strong scientific attitude and a sense of social responsibility. Based on the research results, schools should work on increasing students' understanding of AI by making changes to their teaching plans and offering organized training sessions. Lecturers should focus on being good guides when it comes to using AI, making sure it's used in a thoughtful, fair, and morally right way that follows Islamic values. In addition, there should be clear rules from organizations about how AI is used in education to make sure it is used in a safe and responsible way. The next research should look more closely at how effective it is.

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