

Generative artificial intelligence and academic integrity in Islamic religious education

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Abstract

The development of generative Artificial Intelligence has significantly transformed the learning landscape, including Islamic Religious Education, which inherently places moral values at the core of the educational process. This technology not only accelerates access to information but also affects how students construct answers, develop arguments, and interpret academic honesty. This study aims to examine students' patterns of AI use, the dynamics of their ethical perceptions, and how teachers mediate the use of this technology through value-based pedagogical approaches. Using a mixed-method approach with a sequential explanatory design, data were collected through surveys, semi-structured interviews, and documentation of student assignments involving 30 students and one teacher at SMK Negeri Tutur. The findings show that AI use is not always perceived as weakening academic integrity; rather, it creates a space for moral negotiation shaped by students' ethical perceptions and teachers' pedagogical mediation. The findings also reveal ethical ambivalence, which reflects students' moral reflection in learning practices. Pedagogical responses emphasizing substantive understanding and process-based assessment serve as balancing mechanisms between technological efficiency and character formation. This study expands the discourse on AI and academic integrity by demonstrating that religious values function as important mediating elements in learning practices.

Keywords: Artificial Intelligence; academic integrity; Islamic Religious Education; moral negotiation; authentic assessment.

Abstrak

Perkembangan Kecerdasan Buatan (AI) generatif telah secara signifikan mengubah lanskap pembelajaran, termasuk Pendidikan Agama Islam, yang secara inheren menempatkan nilai-nilai moral sebagai inti dari proses pendidikan. Teknologi ini tidak hanya mempercepat akses terhadap informasi, tetapi juga memengaruhi cara siswa menyusun jawaban, mengembangkan argumen, dan menafsirkan kejujuran akademik. Penelitian ini bertujuan untuk mengkaji pola penggunaan AI oleh siswa, dinamika persepsi etis mereka, serta bagaimana guru memfasilitasi penggunaan teknologi ini melalui pendekatan pedagogis berbasis

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nilai. Dengan menggunakan pendekatan campuran (mixed-method) berdesain eksplanatori sekuensial, data dikumpulkan melalui survei, wawancara semi-terstruktur, dan dokumentasi tugas siswa yang melibatkan 30 siswa dan satu guru di SMK Negeri Tutar. Temuan menunjukkan bahwa penggunaan AI tidak selalu dipersepsikan sebagai melemahkan integritas akademik; sebaliknya, hal ini menciptakan ruang untuk negosiasi moral yang dibentuk oleh persepsi etis siswa dan mediasi pedagogis guru. Temuan ini juga mengungkap ambivalensi etis, yang mencerminkan refleksi moral siswa dalam praktik pembelajaran. Respons pedagogis yang menekankan pemahaman substantif dan penilaian berbasis proses berfungsi sebagai mekanisme penyeimbang antara efisiensi teknologi dan pembentukan karakter. Penelitian ini memperluas wacana mengenai AI dan integritas akademik dengan menunjukkan bahwa nilai-nilai keagamaan berfungsi sebagai elemen mediasi yang penting dalam praktik pembelajaran.

Kata kunci: kecerdasan buatan; integritas akademik; pendidikan agama Islam; negosiasi moral; penilaian otentik.

Introduction

The presence of generative Artificial Intelligence in the classroom has shifted the way students acquire, process, and produce knowledge. This technology allows students to quickly formulate answers, access references, and formulate arguments without a deep reflection process (Alkhater et al., 2025; Soomro et al., 2025). This condition presents a pedagogical paradox that AI expands learning opportunities while raising concerns related to cognitive engagement and academic honesty (Bittle & El-Gayar, 2025; Hasin et al., 2025). Several studies have shown that large language models can function as cognitive partners in the learning process but also have the potential to reshape students' patterns of knowledge production (Kasneci et al., 2023; Shahzad et al., 2025). In the context of religious education, this problem becomes more complex because the learning process is not only oriented to mastery of the material, but also to the formation of character. The use of AI in Islamic education presents a space for negotiation between technological efficiency and moral values that are at the core of the educational process. This phenomenon is important to study academically because it reflects epistemic changes in learning practices while challenging the way educators interpret academic integrity in the digital age (Dwivedi et al., 2023).

Research on AI in education shows three main trends. First, AI is positioned as a cognitive partner that helps in text production and improves learning efficiency (Frenze-Shim et al., 2024; Godwin-Jones, 2022). Second, other research highlights the risk of academic integrity violations, particularly in the form of reliance on generative technology outputs (Kofinas et al., 2025; Okaibedi,

2023). Third, a number of studies emphasize the importance of pedagogical adaptation through authentic assessments in response to these changes (Gonsalves, 2025; Khlaif et al., 2025; Kickbusch et al., 2025; Perkins et al., 2024; Peters & Angelov, 2025). Most research still positions academic integrity within the regulatory and control framework of technology, so the relationship between the use of AI, moral awareness, and the mediation of religious values has not been conceptually well understood. As a result, academic integrity is often understood as a matter of compliance with formal rules, rather than as an ethical negotiation process formed through pedagogical interactions and value systems in learning. This study repositions academic integrity in the era of Artificial Intelligence as a relational construct based on religious values.

The problem of this study lies in the dynamics of the use of AI by students in religious subjects and its implications for academic honesty. Previous research emphasizes the importance of understanding AI integration contextually to formulate adaptive and ethical pedagogical strategies (Alqahtani & Wafula, 2024; Chang et al., 2023; Ren & Wu, 2025). To comprehensively understand this issue, the research asks three main questions: how do students use AI, how do they interpret the use of the technology ethically, and how do teachers respond to shaping responsible AI use practices. The formulation of these questions reflects the need to view AI use not only as a technological phenomenon but also as a social practice influenced by the interaction between students, teachers, and the values embraced in religious learning.

This study is based on the assumption that the use of AI does not directly undermine academic honesty, but gives rise to a space for moral negotiation mediated by student perceptions and teachers' pedagogical practices. The more intensively technology is used, the greater the possibility of shifts in students' epistemic agency, particularly in the production of academic texts. (Kim et al., 2025). However, the influence depends on how the value of honesty is articulated in learning practices and evaluation strategies. Recent research shows that authentic and reflective assessment design can serve as a regulative mechanism in maintaining academic integrity in the age of AI (Martin et al., 2025). Thus, academic integrity cannot be understood linearly as a technological impact, but rather as the result of an interaction between learning practices, ethical awareness, and pedagogical mediation. This argument opens up space for empirical testing of how religious education can play a role in maintaining a balance between technological innovation and character formation.

Some studies discuss AI in education through two contrasting perspectives, namely as a cognitive partner that increases learning efficiency or as a threat to academic integrity (Bittle & El-Gayar, 2025; Kasneci et al., 2023). However, this

dichotomy has not fully explained the dynamics that occur in the context of religious education, where the learning process is not only related to cognitive achievement but also to character formation and internalization of values. In this context, the use of AI presents a more complex negotiation space. The question is not simply whether AI undermines academic honesty, but how the value of honesty itself is reinterpreted when technology is involved in the production of knowledge. This study departs from the assumption that academic integrity is not static and cannot be reduced to a matter of control over technology. Instead, it is formed through the interaction between AI use practices, students' ethical awareness, and teachers' pedagogical mediation. With this framework, this study seeks to offer a more contextual reading of the relationship between AI and academic integrity in religious education.

This study aims to: (1) analyze the pattern of the use of Artificial Intelligence by students in Islamic Religious Education learning; (2) understand students' ethical perceptions of the use of AI in relation to academic honesty; and (3) analyze how teachers' pedagogical responses mediate the use of AI through value-based learning approaches. This study not only maps patterns of AI use in Islamic Religious Education learning but also offers a conceptual reading of academic integrity in the AI era as being shaped through the interrelation of technological practices, students' ethical awareness, teacher mediation, and religious values embedded in the learning process.

Research Methods

This study employed a mixed-method approach with a sequential explanatory design, in which quantitative data were first used to map initial trends in AI use and were then elaborated through qualitative data from semi-structured interviews and documentation of student assignments. The quantitative component served as an initial mapping of the trend of using AI, while qualitative data were used to explain the social and pedagogical meaning behind it. This approach was chosen because it allows for numerical mapping of learning practice trends as well as the exploration of meaning built by students and teachers (Creswell & Plano Clark, 2018) in the use of such technology. The research process began with the identification of the phenomenon of the use of AI in the classroom, followed by the preparation of instruments based on indicators of use practices, ethical perceptions, and pedagogical responses, and ended with the collection of field data through surveys and interviews. This design is in line with educational research that combines quantitative data to map general patterns and qualitative data to explain the social context behind it. With this approach, the research produced an empirical picture of the practice of using

AI as well as a contextual interpretation of how the value of honesty is mediated in the learning process.

The research participants consisted of 30 students of SMK Negeri Tutar Pasuruan Regency as the main respondents and one religious teacher as a supporting informant who provided a pedagogical perspective. The selection of participants was carried out through purposive sampling taking into account their involvement in the use of AI during the learning process. This study is exploratory-contextual, so it is not directed to produce statistical generalizations, but to gain an in-depth understanding of the dynamics of the use of AI in religious learning. Data collection was carried out through three complementary techniques, namely single-response closed questionnaires, semi-structured interviews, and documentation of student assignments and evaluation practices. The questionnaire was developed based on three main indicators, namely AI use patterns, students' ethical perceptions, and teachers' pedagogical responses, to map AI adoption trends, intensity of use, key functions, and ethical perceptions of students descriptively. Before use, the instrument was substantively examined to ensure the suitability of the question items with the research focus, especially related to the practice of using AI, understanding of academic honesty, and ethical limits of technology use. Semi-structured interviews were used to deepen survey data by delving into student and teacher experiences, ethical considerations in utilizing AI answers, and forms of pedagogical direction of teachers. Meanwhile, the documentation was used as supporting data to strengthen the interpretation of the findings. The combination of these techniques allows triangulation of methods and data sources, thereby increasing the depth of understanding of the phenomenon being studied (Meydan & Akkaş, 2024).

Data analysis was carried out through two complementary stages. The first stage is a descriptive quantitative analysis by calculating the frequency and percentage of student responses to map patterns of AI use and general ethical perceptions (Creswell & Creswell, 2018). The second stage is thematic analysis of interview and documentation data through the process of data reduction, coding, categorization, and drawing of themes related to learning practices, ethical perceptions, and pedagogical responses (Braun & Clarke, 2021). The validity of the data is maintained through triangulation of methods and sources, member checking, and peer discussion to increase the credibility of interpretation (Miles et al., 2020). In addition, the research was carried out by paying attention to ethical principles, including participant consent and the confidentiality of respondents' identities. With this approach, the analysis not only illustrates

statistical trends but also explains the pedagogical context behind the use of AI in religious learning.

Results and Discussion

A. AI as an epistemic infrastructure in Islamic religious education learning

Table 1. Distribution of students' AI use patterns in Islamic religious education

Categories	Indicator	n	%
Adoption	Have used AI	26	86.7
	Never used AI	4	13.3
Intensity of use	Routinely use AI	11	36.7
	Conditional	9	30
	Using AI when facing difficulties	6	20
	Not using AI	4	13.3
Main functions of AI use	Drafting answers	12	40
	Searching for references	8	26.7
	Helping understand the material	6	20
	Not using AI	4	13.3

Source: Processed Researcher

Table 1 shows that as many as 86.7% of students stated that they had used Artificial Intelligence in Islamic Religious Education learning, while 13.3% had never used it. In terms of intensity, 36.7% of students use AI regularly, 30% conditionally according to the needs of assignments, and 20% when they have difficulty understanding the material. Regarding the functions of AI use, 40% of students used AI to draft answers, 26.7% to search for references, and 20% to help understand the subject matter. This data shows that the use of AI has entered the realm of academic text production, not just the information search stage. The dominance of the answer preparation function shows that AI plays a role in helping students organize arguments and formulate answers systematically. Variations in the intensity of use suggest that not all students use AI in the same way, and there are still groups that don't use it at all.

From the data in Table 1, four main trends can be formulated. First, the high adoption rate suggests that AI has been integrated into students' academic practice and is no longer seen as a peripheral technology. Second, variations in usage intensity suggest that AI utilization is situational and adaptive, depending on academic needs. Third, the dominance of the answer preparation function indicates a shift in the role of AI from just an information search tool to an epistemic organizational tool in text production. Fourth, the existence of non-user groups shows that learning practices remain plural and not fully digitized. This trend emphasizes that the use of AI in Islamic Religious Education learning does

not take place monolithically, but develops across a spectrum of different practices.

The findings of the study show that Artificial Intelligence has become part of students' learning practices, particularly in the preparation of answers and the organization of academic arguments. This condition indicates that AI is no longer simply used to search for information, but has been involved in the process of producing students' knowledge. In various studies, large language models are often positioned as cognitive partners that support the thinking process and expand learning capacity (Kasneci et al., 2023). However, in the context of Islamic Religious Education, this role cannot be understood simply as an expansion of cognitive abilities. The questions that arise are not only about the extent to which AI helps students learn, but also how technology affects students' epistemic agency in building understanding and structuring knowledge. Research data show that the use of AI is situational and non-uniform, so it does not support the assumption that technology automatically replaces human thinking processes. In line with Dwivedi et al. (2023), the impact of AI is heavily influenced by the social context, learning culture, and pedagogical design that surrounds it. The use of AI in Islamic Religious Education learning is finally more accurately understood as a transformation of learning strategies that remain within the framework of social interaction, value reflection, and teacher pedagogical mediation. These findings also show the limitations of deterministic approaches in the educational AI literature that tend to view technology in binary terms as a threat or pedagogical solution.

In contrast to previous research that emphasized AI as a tool to improve learning efficiency and support text production (Frenzke–Shim et al., 2024; Godwin-Jones, 2022), this study shows that the use of AI in religious learning is also related to students' epistemic agency negotiations. The main issue is no longer just whether AI helps the learning process, but how technology affects students' relationship with the knowledge they produce. The contribution of this study lies not only in the identification of patterns of AI use, but also in the explanation of the moral and epistemic dimensions that accompany the use of technology in religious education. This perspective is in line with Al-Ghazali's view (2005) which places the search for knowledge not only as an intellectual activity, but also as a process of forming manners and moral responsibility. Al-Ghazali emphasized that knowledge that is detached from ethical awareness can distance humans from the true purpose of education, which is the formation of morals and spiritual closeness. In this context, technology can help the learning process, but it cannot replace the reflective and moral dimensions inherent in knowledge-seeking activities. The use of AI in Islamic Religious Education

learning can ultimately not be understood only as a technological problem, but also as a matter of manners in learning and responsibility for the knowledge produced.

B. Students' ethical perceptions of AI Use in Islamic religious education learning

Table 2. Students' ethical perceptions of AI use

Categories	Indicator	n	%
Perceived benefits	Improve material comprehension	13	43.3
	Speed up task completion	9	30
	Facilitating reference searches	8	26.7
Risk perception	Reducing independent thinking	11	36.7
	Potentially causing dependency	10	33.3
	No negative impact	9	30
Ethical attitude	Acceptable with limitations	14	46.7
	Neutral, depending on use	9	30
	Not ethically problematic	7	23.3

Source: Processed Researcher

Table 2 shows that students' perception of the use of Artificial Intelligence in Islamic Religious Education learning shows a complex and non-singular configuration. A total of 43.3% of students stated that AI helps improve material comprehension, 30% rated that AI speeds up task completion, and 26.7% cited ease of reference search as the main benefit. These figures show that the majority of students view AI as a tool that provides real efficiency and academic support in their learning process. However, in the risk dimension, 36.7% of students stated that the use of AI can reduce the ability to think independently, while 33.3% saw the potential dependence on the technology. In terms of ethical attitudes, 46.7% of students stated that AI can be used with certain limitations, 30% were neutral depending on its use, and 23.3% did not see significant ethical issues. This distribution shows a balance between recognition of the instrumental benefits of AI and awareness of the epistemic consequences that may arise. Narratively, the data show that students do not interpret AI as a completely positive or entirely problematic technology, but rather as an instrument that requires ethical consideration in its use.

From table 2, four main trends can be formulated that reinforce the research findings. First, the benefits of AI as a learning tool are predominantly recognized by students, especially in improving the efficiency of task completion and expanding access to information. Second, awareness of cognitive risks suggests that students do not accept technology without reflection, but rather are aware of the possibility of reduced independence of thinking. Third, the majority of

students choose a moderate ethical position, namely that the use of AI is allowed with certain restrictions, not a total ban or unconditional acceptance. Fourth, the existence of a spectrum of perceptions shows that attitudes towards AI are not homogeneous and are influenced by experience and the context of use in learning. This trend shows that the use of AI is understood as a practice that requires self-regulation and moral consideration.

The ethical ambivalence that emerged in this study shows that students view the use of Artificial Intelligence in a more complex way than just a technological tool. Some students recognize the benefits of AI in improving material comprehension and task completion efficiency, while others are aware of the risk of reduced thinking independence and potential dependence on technology. The predominance of the "may be used with limitations" attitude shows that students do not put AI in a completely positive or negative position, but rather try to negotiate its use within limits that are considered to be still in line with academic values. In the global literature, concerns about AI are often associated with potential violations of academic integrity and weakened authenticity of academic work (Bittle & El-Gayar, 2025). However, the data of this study shows that students do not automatically interpret AI as a means of cheating. Instead, they show that there is a process of moral reflection influenced by the understanding of honesty as part of character formation in religious learning. One student stated that AI helped him "gain an initial understanding of possible answers," but he still felt the need to understand the content before submitting the assignment. In line with Moya et al. (2023), academic integrity can be understood as a relational construct formed through the interaction between individuals, the learning environment, and the values that underlie academic practice. This study shows that in the religious context; relationality also involves a value system that shapes the way students assess the use of technology in the learning process.

Previous research has generally addressed AI in the context of potential violations of academic integrity and the risk of technology dependence (Kofinas et al., 2025; Okaibedi, 2023). This study shows that the use of AI in Islamic Religious Education is not always interpreted as a form of academic deviation, but also as a space for moral reflection influenced by religious values and the pedagogical context of learning. This perspective aligns with Al-Attas's view(1980),which regards education as a process of instilling manners in the use of knowledge. In this context, the use of technology is inseparable from the moral responsibility of the individual to the knowledge acquired and used. The ethical ambivalence that emerged in the study shows that students not only consider AI in terms of pragmatic benefits, but also from its compatibility with the values of honesty taught in religious learning. Academic integrity in the AI era is finally

not enough to be understood as compliance with formal rules alone, but as an ethical reflection influenced by students' awareness of values and moral responsibility in using technology.

C. Pedagogical responses and religious values in the use of AI

Table 3. Students' pedagogical responses and the value of academic integrity in the use of AI

Categories	Indicator	n	%
Teacher response	Teachers encourage the use of AI wisely	12	40
	Teachers emphasize understanding the answer	9	30
	Teachers modify assessment strategies	5	16.7
	No specific response	4	13.3
Evaluation strategy	Process-based assessment	11	36.7
	Reflective discussion	9	30.0
	Analysis-based tasks	6	20
	No changes	4	13.3
Value of honesty	Responsibility to understand answer content	14	46.7
	Using AI as an initial reference	9	30
	Neutral toward values	7	23.3

Source: Processed Researcher

Table 3 shows that teachers' pedagogical responses to the use of AI in Islamic Religious Education learning show patterns that tend to be adaptive and value-based. As many as 40% of students stated that teachers encourage the use of AI wisely, and 30% mentioned that teachers emphasize the importance of understanding the content of the answers generated. In addition, 16.7% stated that there was a modification of the assessment strategy, while 13.3% did not see any specific responses from teachers. In the evaluation strategy, 36.7% of students identified process-based assessment as the main approach, 30% mentioned reflective discussions, and 20% stated the existence of analysis-based assignments. On the value dimension, 46.7% of students emphasized the responsibility to understand the content of the answers, and 30% viewed AI as a starting reference. This data shows that teachers do not reject AI outright, but rather direct its use within the framework of understanding academic substance and responsibility. Narratively, the visualization shows the integration between evaluation strategies and value emphasis in learning practices.

Four main trends can be formulated from the visualization of the data. First, teachers act as normative mediators in the use of AI, emphasizing wise and responsible use. Second, evaluation strategies show a tendency to shift towards a process-based and reflection-based approach, which demands a deep understanding rather than simply the reproduction of answers. Third, the internalization of the value of responsibility is the dominant orientation of students in interpreting the use of AI. Fourth, pedagogical adaptation has not

been completely evenly distributed, as can be seen from the small number of students who do not feel a change in strategy. This trend emphasizes that the use of AI is not only influenced by student preferences but also by the learning design and evaluation strategies implemented by teachers.

Teachers' pedagogical responses are an important factor in balancing the use of Artificial Intelligence in Islamic Religious Education learning. Instead of implementing an absolute ban, teachers tend to emphasize the importance of substantive understanding, critical reflection, and responsible use of technology. Interview data with the teacher reinforced this finding. The teacher emphasized that AI use was not entirely prohibited, but students were expected to restate answers in their own words to ensure that the learning process reflected understanding and academic honesty. Process-based evaluation strategies, reflective discussions, and emphasis on understanding the content of answers show that the learning orientation is not only directed at the outcome, but also at the thinking process that underlies the preparation of students' answers. The international literature emphasizes the importance of redesigning assessments in response to the development of generative AI (Kickbusch et al., 2025; Perkins et al., 2024). However, the findings of this study show that in the context of Islamic Religious Education, authentic assessment has a broader dimension than just maintaining the originality of academic tasks. Learning evaluation is also a space for internalizing values, building character, and strengthening students' moral responsibility in using technology. In line with Tan and Maravilla (2024), technology does not inherently undermine education; the impact is greatly influenced by the way the technology is integrated into pedagogical practice. Pedagogical mediation in this study is ultimately understood not only as an academic evaluation strategy but also as a value-based educational practice that shapes the way students interpret honesty, responsibility, and the use of technology in a proportionate manner.

Previous research has generally viewed assessment redesign as a technical response to the development of generative AI (Kickbusch et al., 2025; Perkins et al., 2024). This study expands the discussion by showing that in the context of Islamic Religious Education, authentic assessments also function as a medium for forming moral awareness and ethical reflection of students towards the use of technology. This perspective is in line with the tradition of Islamic education which views teachers not only as transmitters of knowledge, but also as *murabbi* who guides the formation of manners and character of students. Ibn Khaldûn (2004) emphasizes the importance of habituation, example, and gradual guidance in the educational process so that knowledge is not separated from the moral dimension. This view is relevant to the research findings that teachers do not

choose a prohibitive approach to AI, but direct its use through reflection, understanding of substance, and process-based evaluation. In this context, the use of AI is not positioned as a threat to be avoided, but rather as an instrument that needs to be mediated pedagogically and ethically. Academic integrity in the AI era is ultimately not sufficiently understood through control and regulatory approaches alone, but also through the process of moral awareness formation that takes place in pedagogical interactions in the classroom.

Conclusion

This study shows that the use of Artificial Intelligence in Islamic Religious Education learning does not automatically weaken academic integrity; rather, it creates a space for moral negotiation shaped by students' ethical perceptions and teachers' pedagogical mediation. Students mainly used AI to draft answers, search for references, and understand learning materials. However, this use was accompanied by awareness of the risks of reduced independent thinking and potential dependence on technology. The main contribution of this study lies in repositioning academic integrity as a relational construct grounded in religious values. In this sense, integrity is not merely understood as compliance with formal rules but as the result of interactions among AI use practices, students' moral reflection, teachers' assessment strategies, and the internalization of honesty. In this context, pedagogical responses based on authentic assessment, reflective discussion, and emphasis on substantive understanding function as important mechanisms for balancing technological efficiency and character formation. However, this study is limited by its single-school context, small number of participants, and descriptive design, which did not examine causal relationships between variables. Future research should expand the educational context, use longitudinal approaches, and examine AI literacy, institutional policies, and value-based assessment models as additional variables to provide a more comprehensive understanding of academic integrity in religious learning in the era of generative AI.

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