



Lecturers' Perceptions of Artificial Intelligence Use in Higher Education: A Comparative Study of Indonesia and Malaysia

^{1*}Azizah Hanum OK, ²Junaidi Arsyad, ³Yusnaili Budianti, ⁴Rusydi Ananda, ⁵Syahirah Abdul Shukor, ⁶Mohd Anuar Ramli

^{1,2,3,4} Universitas Islam Negeri Sumatera Utara, ⁵ Universiti Sains Islam Malaysia, ⁶ Universiti Malaya, Kuala Lumpur

*E-mail korespondensi: azizahhanum@uinsu.ac.id

Diserahkan: 1th November 2025; Direvisi: 23th December 2025; Diterima: 30th December 2025

Abstrak

Integrasi kecerdasan buatan (AI) semakin memengaruhi praktik pembelajaran di pendidikan tinggi, baik dalam efektivitas pedagogis maupun dinamika interaksi akademik. Penelitian ini menganalisis bagaimana dosen di Indonesia dan Malaysia memaknai serta mempraktikkan penggunaan AI, sekaligus mengidentifikasi faktor yang membentuk persamaan dan perbedaannya. Pendekatan kualitatif dengan desain *comparative case study* digunakan, melibatkan 30 dosen melalui survei naratif dan wawancara semi-terstruktur. Data dianalisis menggunakan *Interpretative Phenomenological Analysis* (IPA) dan analisis tematik. Hasil penelitian menunjukkan bahwa AI dipandang sebagai alat yang meningkatkan efisiensi kerja akademik dan mendukung pengembangan materi pembelajaran. Namun, muncul kekhawatiran mengenai ketergantungan mahasiswa, penurunan kemampuan berpikir kritis, serta akurasi keluaran AI. Perbedaan antarnegara terlihat pada kedalaman integrasi: dosen Malaysia cenderung lebih intensif memanfaatkan AI dalam aktivitas pembelajaran, sedangkan dosen Indonesia lebih berhati-hati dan menekankan verifikasi manual. Faktor kebijakan institusional, literasi digital, dan budaya akademik turut membentuk variasi tersebut. Temuan ini menegaskan pentingnya kebijakan penggunaan AI yang jelas serta penguatan literasi etis bagi dosen dan mahasiswa.

Kata kunci: analisis fenomenologi interpretatif (IPA), dosen, kecerdasan buatan, pendidikan tinggi

Abstract

The integration of artificial intelligence (AI) is increasingly influencing learning practices in higher education, both in pedagogical effectiveness and in the dynamics of academic interaction. This study analyzes how lecturers in Indonesia and Malaysia interpret and practice the use of AI while identifying factors that form similarities and differences. A qualitative approach with a comparative case study design was used, involving 30 lecturers through narrative surveys and semi-structured interviews. The data were analyzed using Interpretative Phenomenological Analysis (IPA) and thematic analysis. The results show that AI is considered a tool that improves the efficiency of academic work and supports the development of learning materials. However, there are concerns about student dependency, decreased critical thinking skills, and the accuracy of AI output. Differences between countries can be seen in the depth of integration: Malaysian lecturers tend to use AI more intensively in learning activities, while Indonesian lecturers are more cautious and emphasize manual verification. Institutional policy factors, digital literacy, and academic culture also influence these variations. The findings emphasize the value of developing clear AI policies and strengthening ethical literacy for faculty and students.

Keywords: artificial intelligence, higher education, Interpretative Phenomenological Analysis (IPA)

How to Cite: OK, A. H., Arsyad, J., Budianti, Y., Ananda, R., Shukor, S. A., Ramli, M. A. (2025). **Lecturers' Perceptions of Artificial Intelligence Use in Higher Education: A Comparative Study of Indonesia and Malaysia.** *Tarbiyah wa Ta'lim: Jurnal Penelitian Pendidikan dan Pembelajaran*, 12(3) 335-348. doi: <https://doi.org/10.21093/twt.v12i3.12041>



<https://doi.org/10.21093/twt.v12i3.12041>

Copyright© 2025, OK, Azizah Hanum et al

This is an open-access article under the [CC-BY License](#).



INTRODUCTION

In the past two decades, the acceleration of digital technology has been very rapid and has had a wide impact on various aspects of human life. Green et al (2022) confirms that the global community is now living in an increasingly complex digital ecosystem, so the world of education is required to adapt in order to be able to develop technical skills as well as the capacity for critical, creative, and adaptive thinking. Along the same lines, Porayska-Pomsta et al (2024) emphasize that the integration of artificial intelligence (AI) in learning has the potential to strengthen students' analytical abilities, creativity, and learning independence. With these developments, digital transformation is now essential for creating a higher education ecosystem that looks to the future.

In the realm of higher education, AI is emerging as one of the most prominent innovations. Recent studies on automated written feedback show that AI-based systems are now able to provide formative feedback that resembles human evaluation, especially in analyzing writing structure and errors (Green et al., 2022). In addition, survey research in Indonesia indicates that the adoption of AI tools by the academic community is increasing, although the readiness of institutions and infrastructure still varies greatly (Helmiatin et al., 2024). A similar phenomenon is seen in Malaysia, which is driven by national-level policy commitments. The launch of the National AI Office (NAIO) on December 12, 2024, is a strategic step to align policies, strengthen governance, and increase human resource capacity in the field of AI—policies that have also influenced the implementation of this technology in the education sector (MyDigital Malaysia, 2024; Reuters, 2024). At the regional level, the AI policy discourse in the ASEAN region also emphasizes the importance of accelerating AI literacy and equitable distribution of digital infrastructure as prerequisites for inclusive technology adoption (Isono & Prilliadi, 2023). Furthermore, the nations within ASEAN are advancing in AI adoption and governance at disparate rates, exhibiting a range of maturity in their national AI strategies and regulatory preparedness. This underscores the necessity for more cohesive regional frameworks to facilitate responsible and interoperable AI implementation throughout Southeast Asia (Isono & Prilliadi, 2023). This wider regional focus shows that governance, capacity building, and sociocultural readiness all play a part in the advancement of AI.

Nevertheless, the utilization of AI in higher education gives rise to ethical and pedagogical discourses that cannot be ignored. Rana et al., (2024) cautioned that excessive dependence on generative systems may undermine critical thinking, diminish the originality of scientific research, and instigate plagiarism. The risk of algorithmic bias, data privacy violations, and content inaccuracies has become an increasingly relevant issue as the use of these technologies intensifies (Mimoudi, 2024). In the context of academic integrity, generative tools such as ChatGPT can support the learning process but still require digital literacy and mature analytical skills so that their use is not abused (Cotton et al., 2023). It is crucial for educators to understand how to strike a balance between opportunity and moral responsibility because of these risks.

The discourse on the role of educators is also evolving as the use of AI increases. Porayska-Pomsta et al., (2024) emphasize that even though AI can support the learning process at the initial exploration stage, this technology cannot replace the role of lecturers as facilitators who provide interpretation, context, and humanitarian dimensions in learning. In addition, (UNESCO, 2023) affirms that the use of AI in educational institutions must be accompanied by clear ethical and pedagogical considerations that align with broader educational objectives. At the ASEAN level, experts emphasise the necessity of cultivating collective ethical standards and human-centered AI frameworks to direct educational institutions, thereby ensuring that technological progress does not surpass the essential safeguards for transparency, fairness, and inclusion (Isono & Prilliadi, 2023).

Based on these dynamics, understanding how lecturers interpret and practice the use of AI in the context of higher education—both in Indonesia and Malaysia—is an important

foundation for mapping the potential, challenges, and development directions for the effective and responsible use of AI. Thus, this study investigates educators' lived experiences, perceptions, and meaning-making processes when integrating AI in two distinct nations.

Despite the growing body of research on AI adoption in higher education, existing studies predominantly focus on technological readiness or student perspectives within single-country contexts. Limited attention has been paid to lecturers' lived experiences and meaning-making processes, particularly in comparative cross-national settings within Southeast Asia. Moreover, empirical studies employing Interpretative Phenomenological Analysis (IPA) to explore lecturers' perceptions of AI remain scarce. This study addresses these gaps by performing cross-national qualitative assessments between educators in Malaysia and Indonesia. It also demonstrates how the opportunities, issues, and ethical ramifications of using artificial intelligence are viewed by both sides.

RESEARCH METHOD

Research Design

This research utilizes a qualitative methodology, specifically employing a comparative case study approach. This methodology was selected as it enables the researcher to thoroughly examine the implementation of Artificial Intelligence (AI) within higher education settings in Indonesia and Malaysia (Yin, 2018). This strategy enables the study to comprehend the contextual nuances of AI implementation by taking into account variations in policy, academic culture, and the degree of technological advancement present in both nations (Bartlett & Vavrus, 2017). Malaysia has been identified as a representative nation exhibiting a comparatively advanced stage of AI adoption, whereas Indonesia showcases significant progress in the integration of AI within university educational frameworks. This methodology aims to produce a nuanced comparative analysis that elucidates the similarities and differences, as well as the policies and implementation strategies of AI within the realm of higher education across various national contexts. This study also employed clear methodologies to ensure methodological rigor, including continuous engagement with participants, triangulation across various data sources, and peer observation of analytical procedures to bolster the credibility of the comparative design.

Participants

The study involves 30 university lecturers, with 15 participants from Indonesia and 15 from Malaysia. Participants were deliberately chosen based on their engagement in pedagogical practices and their proficiency in utilizing technology, especially artificial intelligence, within educational environments. The participants were regarded as having pertinent insights and experiences that could yield profound reflections on the application of AI in higher education. In order to encapsulate the rich tapestry of experiences, the study employs a qualitative narrative methodology within a comparative case study framework. This approach enables the researcher to delve into the personal narratives of lecturers from two distinct national contexts, facilitating a deeper understanding of the similarities and differences in their interpretations and responses to the integration of AI. The attributes of the participants exhibit a rich diversity concerning age, areas of specialization, and academic standing, as illustrated in the subsequent table:

Table 1. Participant Characteristics

Category	Subcategory	Indonesia (n=15)	Malaysia (n=15)
Age	< 30 years	1 (7%)	1 (7%)
	30 – 39 years	3 (20%)	4 (27%)
	40 – 49 years	6 (40%)	6 (40%)
	≥ 50 years	5 (33%)	4 (27%)
Gender	Male	7 (47%)	9 (60%)
	Female	8 (53%)	6 (40%)
Field of Expertise	Education	3 (20%)	2 (13%)
	Islamic Law/Fiqh/Sharia	2 (13%)	7 (47%)
	Economy/Communication/Others	4 (27%)	5 (33%)
	Science/Mathematics/Statistics/Early Childhood/Linguistics/Psychology	6 (40%)	1 (7%)
Academic Rank	Lecturer/Assistant Expert	4 (27%)	0 (0%)
	Senior Lecturer/Lecturer	4 (27%)	10 (67%)
	Associate Professor/Head Lecturer	7 (47%)	3 (20%)
	Academic Position (Doctorate)	0 (0%)	2 (13%)
Education	Master's (S2)	4 (27%)	2 (13%)
	Doctorate (S3)	11 (73%)	13 (87%)
Years of Experience	< 5 years	1 (7%)	0 (0%)
	5 – 10 years	4 (27%)	5 (33%)
	11 – 20 years	5 (33%)	7 (47%)
	> 20 tahun / 20 years	5 (33%)	3 (20%)

Overall, the participant profile shows differences in academic positions, age, and area of competence. The majority of participants fall within the productive age bracket of 40 to 49 years and hold doctoral degrees, thereby establishing a robust academic foundation for comprehending and incorporating AI into teaching practices. This variation increases the credibility of the data by making sure that people from different demographics and fields are represented.

Data Collection

The process of data collection involved the utilization of two methodologies: an online survey and semi-structured interviews. The survey was meticulously crafted with open-ended questions utilizing Google Forms, enabling participants to articulate their experiences, perceptions, and practices regarding the use of AI within university environments. Prior to engaging in the survey, participants were provided with a detailed elucidation concerning the objectives of the research, the voluntary aspect of their involvement, and the protocols for ensuring data anonymity. The survey was disseminated from August to October 2025 through WhatsApp, institutional email, and academic groups. The survey instrument comprised ten fundamental questions crafted from existing literature on the utilization of AI, the principles of academic integrity, the fostering of student creativity, and the preparedness of institutions. The chosen open-ended format aims to foster genuine and contextually rich narratives.

In order to enhance the insights derived from the survey findings, semi-structured interviews were carried out with participants who consented to partake in the discussions. Interviews with Malaysian participants were carried out online through Zoom or WhatsApp Call, lasting between 30 to 45 minutes. In contrast, interviews with Indonesian participants

were conducted in person to facilitate a more nuanced exchange of ideas. All interviews adhered to a flexible framework, enabling participants to expand upon their experiences. Upon obtaining the participants' consent, all interviews were meticulously recorded and subsequently transcribed prior to the process of anonymization. Moreover, the methodological triangulation was used to check the availability of data by comparing data from different sources, like field observations, interview transcripts, and survey responses. Member checking involved showing synthesized summaries of initial interpretations to several participants to make sure they were correct and that they were getting their intended meanings. Peer debriefing sessions were also held to critically evaluate the emerging themes and enhance the reliability of the data. All of these steps together made the results more reliable and confirmable.

Data Analysis and Validity

The analysis of data was conducted through the lens of Interpretative Phenomenological Analysis (IPA), adhering to the framework established by Smith & Nizza (2022), who highlight the significance of comprehending how individuals derive meaning from their lived experiences. IPA was employed to investigate the ways in which lecturers conceptualize the utilization of AI, encompassing their views on its advantages, potential hazards, and ethical considerations. The data collected from the online survey and interviews were transcribed word for word, and the researcher engaged in a thorough examination of the transcripts to cultivate a comprehensive understanding of the participants' cognitive frameworks. During the preliminary phase, exploratory notes were produced to discern keywords, underlying values, and primary concerns of the lecturers, aligning with the principles of profound engagement and double hermeneutics in IPA.

Responses were then paraphrased to strengthen the researcher's analytical engagement. The initial notes were refined into emerging themes through the thematic procedures outlined by Braun & Clarke (2006), all the while preserving the intricacies of individual experiences. Carefully chosen quotations were employed to encapsulate the depth and subtleties of participants' processes of meaning-making. The interpretative stage entailed a thorough analysis of how the themes illuminated underlying values, beliefs, and cognitive structures. The analytical process unfolded in an iterative manner, as indicated by Creswell (2014), transitioning from description to interpretation. The concluding themes were systematically organized to illustrate patterns of consistency and variation among participants, thus yielding an interpretative comprehension of the role of AI as an opportunity, a challenge, and a transformative force within higher education. To ensure analytical validity, triangulation of survey and interview data was consistently employed, while peer debriefing offered external evaluation to uphold reflexive rigor and reduce interpretative bias.

RESULTS AND DISCUSSION

Results

Lecturer's Perception of The Use of AI in Learning

An analysis of data from Indonesian and Malaysian lecturers showed that their perceptions about the use of Artificial Intelligence (AI) in learning have layered dynamics. This perception is influenced by the institutional context, academic culture, and personal experience in integrating technology. Despite coming from two different higher education systems, both groups of lecturers essentially view AI as an unavoidable pedagogical innovation. However, the way they assess the benefits, risks, and implications of AI shows different trends—sometimes convergent, but at some point divergent.

The lecturers' interpretation of AI is not only technical but also emotional and epistemic. They feel that the presence of AI changes the rhythm of academic work, their relationships with students, and professional responsibilities in maintaining the quality and integrity of learning. Lecturers are in a new negotiation process—between the ease that AI offers and anxiety about its long-term impact on student mindsets and academic authority.

From an in-depth analysis of the data, five main aspects were found that illustrate how Indonesian and Malaysian lecturers understand the role of AI in learning.

1. AI as an academic and pedagogical work consultant

As a selected major, understand that AI helps prepare the rhythm of academic work, especially in literacy learning, the use of lecture materials, and the manufacture of teaching devices. This efficiency emerged as the most noticeable change after AI began to be integrated into the learning process. Several excerpts reflect this: "AI brings big changes; it helps a lot in learning. Finding Islamic references is easier" (I-9). "AI helps me organize my content; it reduces my prep time significantly" (M-3). "It was like having another mind to brainstorm with when I was preparing for college" (M-12). These findings suggest that AI serves as an "auxiliary academic force" that helps lecturers manage learning, enrich materials, and shorten lecture preparation time. In addition to improving efficiency, AI also sparks new ideas that encourage pedagogical creativity.

2. Concerns about student dependence and decreased quality of thinking

Behind these benefits, there are deep concerns about the impact of AI on student learning patterns. Many lecturers consider that the use of AI instantly has the potential to reduce the intensity of student critical thinking. It appears in statements such as: "The opportunity is great, but the student risks becoming dependent" (I-14). "Students now seek instant answers; they often ask AI without considering the implications" (I-6). "AI can misinterpret religious concepts; students rely too much without verifying" (M-8). This concern reflects the phenomenon of automation dependency, where students trust AI output without adequate verification and reflection processes. In certain fields—such as Islamic studies or interpretation-based sciences—the risk of reasoning errors becomes greater if students rely too much on AI answers.

3. Shifting academic relations: lecturers as curators of knowledge

The increasing use of AI by students affects academic relationships in the classroom. Lecturers are no longer the only source of knowledge; students often bring findings from AI and make them the basis of questions or arguments. Some lecturers describe the dynamics: "Today's students are more sophisticated; sometimes they ask what they just learned from AI" (I-3). "There were times I had to straighten out AI answers that students brought in class" (I-11). "AI makes discussions more active" (M-2). This change shifted the role of lecturers to become curators and validators of knowledge. Lecturers must clarify, verify, or reinterpret the information brought by students from AI. Although it demands more effort, some lecturers see this dynamic as an opportunity to spark more critical and active class discussions.

4. AI as an academic partner in the learning ecosystem

With the increasing experience of use, many lecturers are beginning to view AI not as a threat, but as an academic partner. AI is positioned as an "intellectual co-worker" that helps broaden perspectives and come up with new ideas. Some statements that corroborate this perspective include: "AI is not a substitute teacher; it's a partner. We must control" (I-7). "AI supports me in thinking of new angles while teaching. It pushes creativity" (M-14). This role strengthens the position of lecturers as learning designers who combine pedagogical intuition with intelligent system capabilities. Lecturers remain the main decision-makers, while AI serves as an option provider or idea lighter.

5. Academic ethics and professional growth of lecturers

AI affects not only on students but also the professional identity of lecturers. Many lecturers recognize that they must improve digital literacy as well as update teaching strategies to remain relevant in an increasingly digitized learning environment. Some lecturers affirm: "As a lecturer, I have to learn more in order not to lose to students who use AI" (I-13). "Some AI-generated explanations are not aligned with accepted scholarly interpretations" (M-10). This concern indicates that lecturers feel the need to strengthen their

capacity to manage academic risks that may arise due to the use of AI. At the same time, AI is a trigger for professional reflection regarding ethics, judgment, and learning quality.

Indonesia–Malaysia Higher Education Policy in Response to AI Developments

Research findings on this theme indicate that institutional policies regarding the use of AI in higher education are still at an early stage, have not been evenly distributed between institutions, and often cause uncertainty for lecturers. For most participants, policy is understood not only as a set of administrative rules but also as an ethical and academic framework that should provide clear direction. Nevertheless, the majority of lecturers describe that they are still moving without adequate institutional guidance.

Several participants in Indonesia explicitly stated the absence of specific regulations or guidelines for reference. Statements like “No, there is no regulation or framework that regulates the corridors for the use of AI media in the learning process” (I-3) and “to my knowledge there are no specific rules” (I-11) reveal a significant policy vacuum. Similar things are conveyed through other comments such as “until now, as far as I know, there is none” (I-6) and “there is no massive use of AI in my current campus environment” (I-14).

Even if there are lecturers who assess institutional policies as “self-explanatory” the narrative still shows weaknesses in implementation. For example, “it is quite obvious, but there are still many gaps because students use AI Humanizer to avoid it” (I-7), which indicates that existing regulations have not been able to capture the complexity of the variation in the use of AI by students. This situation makes lecturers have to interpret their own ethical limits on the use of AI so that assessment standards and control mechanisms become non-uniform.

Although formal policies are not yet fully available, Indonesian lecturers are aware that institutions must take immediate action. Some lecturers propose the need for gradual and adaptive policies, such as: “AI policies in colleges should be evolutionary, not revolutionary... to maintain the quality of learning” (I-5). “Policies should support the critical, creative, and productive use of AI without compromising academic integrity” (I-12). “There is a need for increased socialization and workshops” (I-9).

In Malaysia, the policy picture appears to be more structured, although not yet fully mature. Some lecturers reported the absence of a formal policy, such as “No policy at all” (M-4), while others mentioned that the policy was in the process of being reviewed: “So far, we do not have a clear policy... but it is currently being seriously reviewed at the committee level” (M-2). This suggests that institutions are beginning to take systematic steps, although operational guidelines are not yet fully available.

Some Malaysian lecturers consider that the existing institutional guidelines are still too general. As the saying goes, “current institutional policies are still general. Clear guidelines on transparency, data privacy, and academic integrity are urgently needed” (M-9) underscored the need for more detailed and applicable rules. Other responses, such as “Yes, but it could be better. The faculty started to implement it and stressed over time to remind students” (M-13), indicating the early efforts of implementation. There is also a perception that the policy framework has begun to form but still requires more clarity: “I think current university policies on AI use are still not obvious... but they aim to ensure AI is used productively while maintaining academic integrity” (M-5).

Encouragement for more specific ethical guidelines also emerged from various participants. Some Malaysian lecturers emphasize: “It needs clear regulations on how AI should be implemented, along with specific guidelines” (M-7). “Policies should emphasize transparency, citation of AI use, and academic honesty” (M-10).

While from Indonesia, one strong comment highlighted the importance of stricter rules: “Rules should be made binding on students, as well as consequences if violated” (I-8). The findings indicate an urgent need to provide a policy framework that not only regulates the use of AI but is also capable of facilitating the ethical, productive, and responsible use of such technologies.

Overall, lecturers in both countries agree that AI-related policies are a necessity that cannot be delayed. This is illustrated in comments such as: "AI policies should support critical and creative use" (I-15). "Clearer frameworks are needed so that AI supports learning without misuse" (M-6). AI has changed the way students learn and do tasks, so AI policies need to be not only regulatory but also the foundation for the transformation of learning in higher education.

Similarities and Differences in The Perception and Practice of Using AI in Indonesian and Malaysian Universities

Research findings show that lecturers in Indonesia and Malaysia utilize Artificial Intelligence (AI) for relatively similar pedagogical purposes. In general, AI is used to structure lecture material, summarize reading, and simplify complex concepts. Statements such as "AI helps me outline material more quickly and concisely" (I-8) or "AI is useful for generating examples..." (M-11) indicate a stable perceived usefulness in both contexts. In this sense, AI is positioned as a tool capable of increasing academic efficiency while strengthening pedagogical productivity.

However, the depth of AI integration shows significant differences between countries. Indonesian lecturers tend to use AI in the early stages of learning planning and emphasize manual verification of the results provided by AI. This tendency is reflected in the statement, "I use AI to summarize and search for ideas, but I still double-check the results" (I-14). This approach shows strong epistemic caution.

In contrast, Malaysian lecturers show a broader level of integration. They utilize AI not only for initial planning but also in the drafting of learning activities and feedback drafts. A Malaysian lecturer said, "I use AI to design learning activities... and draft feedback" (M-3). This variation is consistent with the concept of institutional readiness, namely infrastructure readiness, policy clarity, and training support that affect the courage and depth of technology adoption.

Despite differences in depth of use, the two groups of lecturers shared similar concerns regarding the accuracy of AI output. Statements such as "AI often gives wrong answers but sounds convincing" (I-6) and "Sometimes the explanation... is factually inaccurate" (M-15) affirm the existence of epistemic vigilance. The lecturers realized that AI could produce false information that seemed convincing, thus demanding more careful verification.

Another concern arises regarding the potential dependence of students on AI. Indonesian lecturer reveals, "Students become too lazy to think..." (I-10), while a Malaysian lecturer states the same thing: "Students rely too much on AI..." (M-5). This situation causes pedagogical anxiety, especially related to the risk of automation dependency and the weakening of students' critical thinking skills. To respond to such risks, the pedagogical approaches of the two countries show significant differences. Indonesian lecturers apply more manual restrictions and controls on the use of AI by students—"I limit the use of AI..." (I-2)—which reflects an academic culture that emphasizes authenticity and rigorous verification.

Meanwhile, Malaysian lecturers prefer an educative approach through strengthening AI literacy. "I teach them how to use AI responsibly..." (M-9), said one participant. This approach positions AI as a tool that can be used critically through mentoring, rather than through strict restrictions.

Institutional policy becomes the most prominent differentiating factor. Indonesian lecturers describe the absence of clear guidelines—"there is no governing policy..." (I-4)—as leading to ambivalent perceptions and excessive caution. In contrast, the Malaysian lecturer reported that the initial policy framework is already available, although it is still in the development stage: "Policy... under review, and we have some basic guidelines" (M-7). The existence of the policy, although not perfect, provides legitimacy and a sense of security for Malaysian lecturers to practice AI in greater depth.

Technology literacy and digital experience factors also influence these differences. Indonesian lecturers stated that they are still in the learning process—"I am still learning..." (I-1)—which shows the level of trust in AI that has not been established. In contrast, the Malaysian lecturer described a longer experience in using digital tools, especially since the COVID-19 pandemic: "We have been using AI tools for a quite some time..." (M-12). A more mature digital experience forms a more stable technological habitus.

Academic culture and pandemic experiences also reinforce differences in viewpoints. Indonesia maintains a manual orientation and caution against plagiarism—"we still emphasize the authenticity of the writing..." (I-7)—while Malaysia encourages technological exploration—"Our institution encourages us to experiment..." (M-9). Another response corroborates this: "COVID forced us to innovate faster..." (M-14), which indicates that the pandemic is accelerating the adoption of digital technology in Malaysia.

Differences in risk mitigation strategies also widened the perception distance between the two countries. An Indonesian lecturer highlights ethical risks and possible degradation of students' thinking skills—"I'm afraid AI is making students not learn their thinking process" (I-5). On the other hand, Malaysian lecturers see that such risks can be controlled through proper education—"AI is fine as long as we teach them how to use it ethically" (M-6). This difference cannot be separated from the training support; Indonesian lecturers report a lack of official training—"we have never had official training..." (I-15)—while Malaysian lecturers mention institutional support: "Our university provides sessions..." (M-4).

Overall, these findings suggest that, although Indonesian and Malaysian lecturers both view AI as a useful tool, variations in institutional readiness, technological literacy, policy support, and digital experience shape different patterns of utilization and pedagogical strategies. The similarities lie in the recognition of the benefits of AI and the awareness of its risks, while the differences lie in the depth of adoption and the mechanisms of supervision, as well as the pedagogical orientation in navigating the integration of AI.

Discussion

The findings of this study offer an in-depth assessment of how lecturers in Indonesia and Malaysia interpret the presence of Artificial Intelligence (AI) in learning. Through the Interpretative Phenomenological Analysis (IPA) approach, it can be seen that the perception and practice of using AI are shaped by a complex interaction between daily teaching experience, institutional readiness, and academic culture that develops in two higher education contexts. By relating empirical findings and related literature, this section addresses three main themes.

Lecturer's Perception on The Use of AI in Learning

Lecturers' perceptions of AI showed ambivalent patterns consistent with global findings. On the other hand, AI is considered an accelerator of pedagogical work capable of speeding up the search for literature, summarizing readings, generating learning examples, and helping with the preparation of materials. This is in line with studies that confirm that generative AI can increase instructional productivity and reduce the workload of educators in administrative and pedagogical tasks (Li, 2024; Rajassekharan et al., 2020).

However, concerns about the decline in students' critical thinking skills accompany this benefit. The findings of the study indicate the phenomenon of cognitive offloading and automation bias, where students tend to trust AI output without adequate verification. Cognitive psychology theory, especially the principle of distributed cognition, corroborates this apprehension, indicating that excessive dependence on external systems may hinder internal reasoning processes (Green et al., 2022). These concerns are consistent with the findings of Kasneci et al (2023) and Green et al (2022), who found that excessive use of AI can reduce student cognitive engagement and increase the risk of plagiarism and academic abuse.

In addition, the epistemic relationship between lecturers and students is shifting. When students bring answers or ideas from AI into the classroom, the role of the lecturer changes from a primary source of knowledge to a curator and validator of information. This shift reflects the concept of knowledge reconfiguration mentioned in the literature, where lecturers play the role of sensemakers who maintain coherence, validity, and academic ethics in an increasingly digitized learning environment (Mishra, 2025). These results are consistent with sociocultural learning theory. This theory highlights how crucial educators are to overseeing the meaning-making process in a technologically advanced society (Ofosu-Ampong, 2024).

Nevertheless, some lecturers view AI as an academic partner that enriches perspectives and stimulates creativity. This is in line with the idea of augmented pedagogy, where AI does not replace humans but expands the intellectual capacity of educators and encourages more reflective and innovative learning (Porayska-Pomsta et al., 2024). This indicates that lecturers' acceptance of AI is influenced not only by its functional utility but also by their pedagogical identity, signifying a transition towards hybrid human–AI instructional models.

Indonesia–Malaysia Higher Education Policy in Response to AI Developments

A notable difference between the two countries lies in institutional policy readiness. The research findings show that in Indonesia, the absence of formal guidelines on the use of AI causes lecturers to have to navigate using this technology independently. This policy vacuum condition creates irregularities in implementation, so lecturers rely on their professional intuition. This phenomenon is in line with the analysis of Williamson & Williamson (2019) and Selwyn (2024), which states that many countries are still at a reactive stage in responding to AI developments, so they do not yet have a comprehensive regulatory framework. This shows how uncertainty about policies makes educators feel insecure about their jobs and their knowledge, which adds to the research on "policy lag" in digital governance.

In contrast, Malaysian lecturers describe the existence of initial guidelines or policy-making processes at the university level. Although not yet perfect, the existence of this initial framework provides a sense of security and legitimacy for lecturers to integrate AI more deeply. This is in line with the literature on Malaysia's digital policy readiness, which shows that the Malaysian education system has a more mature technology policy tradition than some other ASEAN countries (Isono & Prilliadi, 2023). These conditions illustrate how institutional scaffolding influences lecturers' confidence and their readiness to experiment with AI-enhanced pedagogies, in accordance with technology acceptance theories that highlight organizational support as a critical factor.

The findings affirm that clear, adaptive, and evolutionary policies are essential prerequisites for directing the ethical, inclusive, and productive utilization of AI. The international literature also emphasizes that AI policies should focus on transparency, accountability, and data protection, as well as training for educators (Porayska-Pomsta et al., 2024; UNESCO, 2023). These are reflected in the aspirations of lecturers in both countries who emphasize the need for a regulative framework that supports the critical and creative use of AI. Therefore, policy environments don't just control how things are done; they also shape the ways people think about and teach AI.

Similarities and Differences in the Perception and Practice of Using AI in Indonesian and Malaysian Universities

The findings show similarities and differences that reflect influences from levels of digital literacy, institutional readiness, and technology experience. The main similarity lies in the use of AI to support pedagogical tasks, including the simplification of the material and the development of learning activities. This is in accordance with the study of Ofosu-Ampong (2024), which shows that perceived usefulness is a dominant factor in the adoption of

educational technology. This indicates that functional advantages persist as the predominant catalyst for early adoption in various contexts.

Significant differences are seen in the depth of integration. Indonesian lecturers still show epistemic caution and prioritize manual verification of AI results, while Malaysian lecturers use AI for various stages of teaching, including feedback. This variation reflects the influence of different institutional readiness and digital experiences (Ofosu-Ampong, 2024). These differences back up the idea that AI adoption is a socio-technical phenomenon that is shaped by both individual skills and the history of digitalization in institution.

Risk mitigation approaches are also different. Indonesia's approach tends to be risk avoidance—limiting the use of AI to prevent abuse—while Malaysia adopts risk mitigation through literacy, which provides education and guides students to use AI responsibly. The literature shows that AI literacy-based approaches produce more positive pedagogical impacts than overly restrictive ones (Green et al., 2022). This shows that institutions become more ethical and pedagogically mature when they stop using prohibition and start using empowerment strategies.

The experience of the pandemic also widened these differences. The Malaysian lecturer reported that the pandemic became an acceleration point in the use of digital technology, thus creating a more mature technological habitus. Indonesian lecturers, on the other hand, said that they were still getting used to AI and that there wasn't enough institutional training on the subject. These different paths show how adopting technology in response to a crisis can create different long-term technological cultures.

Overall, these similarities and differences suggest that the adoption of AI is influenced not only by individual preferences but also by the institutional context, academic culture, and policies of the national education system. The findings demonstrate the value of a holistic approach that includes the development of AI literacy, the provision of adequate training, and clear and responsive policies. These interpretations collectively bolster the theoretical assertion that the integration of AI in higher education constitutes a complex socio-pedagogical process influenced by individual beliefs, systemic infrastructures, and national policy contexts.

CONCLUSION

This study shows that Indonesian and Malaysian lecturers' perceptions of the use of Artificial Intelligence (AI) in learning are shaped by a complex interaction between pedagogical experience, institutional readiness, and academic culture. AI is understood as a tool that can accelerate academic work, enrich perspectives, and increase creativity in learning design. However, behind these benefits, there are concerns related to the weakening of students' critical thinking skills, the tendency to rely on AI output, and the risk of misinterpretation of knowledge. Differences in policy preparedness contribute to variations in practice: Indonesian lecturers show epistemic caution due to the absence of clear guidelines, while Malaysian lecturers are more confident thanks to earlier policy frameworks and more established digital experiences. In general, these dynamics show that using AI is closely linked to larger cultural and institutional factors.

These findings present important practical implications for higher education. Institutions need to develop comprehensive AI literacy for faculty and students, including the ability to assess information reliability, understand algorithmic constraints, and apply academic ethics consistently. Adaptive, transparent, and responsive institutional policies are prerequisites for ensuring the productive and responsible use of AI. At the pedagogical level, AI needs to be positioned as a support that strengthens students' thought processes, not a substitute for essential cognitive activity. The study is valuable but limited by its institutional scope and focus on lecturers only. Future research must encompass a variety of stakeholders, including students and quality assurance units, to enrich understanding of pedagogical and regulative interactions. Longitudinal studies are also needed to track changes in practices as technology evolves. In addition, the development of evidence-based pedagogical models and comparative studies

between ASEAN countries will expand the contribution of research to the regional discourse on the integration of AI in higher education.

REFERENCES

- Bartlett, L., & Vavrus, F. (2017). Comparative Case Studies: An Innovative Approach. *Nordic Journal of Comparative and International Education (NJCIE)*, 1(1). <https://doi.org/10.7577/njcie.1929>
- Ben Williamson. (2019). Datafication of Education . In *Rethinking Pedagogy for a Digital Age* (3rd Edition, p. 15). Routledge. <https://doi.org/https://doi.org/10.4324/9781351252805>
- Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023). Chatting and Cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, 228–239. <https://doi.org/https://doi.org/10.1080/14703297.2023.2190148>
- Enkelejda Kasneci, Kathrin Sessler, Stefan Küchemann, Maria Bannert, Daryna Dementieva, Frank Fischer, Urs Gasser, Georg Groh, Stephan Günemann, Eyke Hüllermeier, Stephan Krusche, Gitta Kutyniok, Tilman Michaeli, Claudia Nerdel, Jürgen Pfeffer, Oleksandra Poquet, Michael Sailer, Albrecht Schmidt, Tina Seidel, ... Gjergji Kasneci. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103. <https://doi.org/https://doi.org/10.1016/j.lindif.2023.102274>
- Erin Green, Divya Singh, & Roland Chia. (2022). *AI Ethics and Higher Education Good Practice and Guidance for Educators, Learners, and Institutions* (pp. 4–326). Globethics.net. <https://doi.org/https://doi.org/10.58863/20.500.12424/4146302>
- Helmiatin, Hidayat, A., & Kahar, M. R. (2024). Investigating the adoption of AI in higher education: a study of public universities in Indonesia. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2380175>
- Isono, I., & Prilliadi, H. (2023). *Accelerating Artificial Intelligence Discussions in ASEAN: Addressing Disparities, Challenges, and Regional Policy Imperatives*. 1–39.
- John W. Creswell. (2014). *Research Design, Qualitative, Quantitative, and Mixed Methods Approaches* (fourth edi). SAGE Publication.
- Li, W. (2024). The Influence of Artificial Intelligence on the Education System. *Lecture Notes in Education Psychology and Public Media*, 65(1), 137–142. <https://doi.org/10.54254/2753-7048/65/20240158>
- Mimoudi, A. (2024). AI, Personalized Education, and Challenges. *International Conference on AI Research*, 4(1), 271–280. <https://doi.org/https://doi.org/10.34190/icaire.4.1.3133>
- Mishra, S. (2025). Artificial Intelligence as a Mediator between Educator and Learner: The New Paradigm Shift. *International Journal Of Research And Innovation In Applied Science (IJRIAS)*, 7, 91–95. <https://doi.org/10.51584/IJRIAS>

- MyDigital Malaysia. (2024, December 12). *The National AI Office (NAIO)*. Government of Malaysia. <https://www.mydigital.gov.my/initiatives/the-national-ai-office-naio/>
- Ofosu-Ampong, K. (2024). Beyond the hype: exploring faculty perceptions and acceptability of AI in teaching practices. *Discover Education*, 3(1), 1–16. <https://doi.org/10.1007/s44217-024-00128-4>
- Porayska-Pomsta, K., Holmes, W., & Nemorin, S. (2024). *The Ethics of Artificial Intelligence in Education* (1st Edition). Routledge. <https://doi.org/https://doi.org/10.4324/9780429329067>
- Rajassekharan, D., Ameen, A., & Midhunchakkravarthy, D. (2020). Examining the Acceptance of Innovations in Learning Technologies in Higher Education—A Malaysian Perspective. *Lecture Notes in Networks and Systems*, 118, 179–187. https://doi.org/10.1007/978-981-15-3284-9_21
- Rana, M., Sall, S., Sagvekar Bijoor, V., Gaiwad, V., Gaikwad, U. V., Patil, P., & Meher, K. (2024). Obstacles to the Full Realization and Adoption of Artificial Intelligence (AI). *South Eastern European Journal of Public Health*, 25, 1003–1016. <https://doi.org/https://doi.org/10.70135/seejph.vi.2251>
- Reuters. (2024, December 12). *Malaysia launches national AI office for policy, regulation*. Reuters News Service. <https://www.reuters.com/technology/artificial-intelligence/malaysia-launches-national-ai-office-policy-regulation-2024-12-12/>
- Robert K. Yin. (2018). Case Study: Design and Methods. In *Canadian Journal of Program Evaluation* (6th Edition, Issue 1). SAGE Publications, Inc. <https://uk.sagepub.com/en-gb/eur/case-study-research-and-applications/book250150>
- Selwyn, N. (2024). On the Limits of Artificial Intelligence (AI) in Education. *Nordisk Tidsskrift for Pedagogikk Og Kritikk*, 10(1). <https://doi.org/10.23865/ntpk.v10.6062>
- Smith, J. A., & Nizza, I. E. (2022). *Essentials of interpretative phenomenological analysis*. American Psychological Association. <https://doi.org/https://psycnet.apa.org/doi/10.1037/0000259-000>
- UNESCO. (2023, September 7). *Guidance for generative AI in education and research*. UNESCO Publishing. <https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>
- Virginia Braun, & Victoria Clarke. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/https://doi.org/10.1191/1478088706qp063oa>