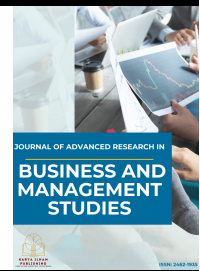




Journal of Advanced Research in Business and Management Studies

Journal homepage:
<https://karyailham.com.my/index.php/arbms/index>
ISSN: 2462-1935



Beyond the Algorithm: Ethical Leadership and Human Values in the Digital Transformation of Higher Education

Tin Shin Thed^{1,*}, Jiahui Yong²

¹ Department of Management, Faculty of Accountancy, Finance and Business, Tunku Abdul Rahman University of Management and Technology, 53000 Kuala Lumpur, Malaysia

² Department of Cardiology, People's Hospital of Xinjiang Uygur Autonomous Region, Urumqi, Xinjiang, China

ARTICLE INFO

Article history:

Received 7 July 2025

Received in revised form 15 August 2025

Accepted 20 August 2025

Available online 25 August 2025

Keywords:

Ethical leadership; artificial intelligence in education; higher education policy; digital ethics, academic integrity; institutional governance

ABSTRACT

Artificial intelligence (AI) is reshaping higher education at both structural and pedagogical levels. While institutions adopt digital tools to enhance efficiency and innovation, many fail to account for the ethical, cultural, and human consequences of AI integration. This paper argues that ethical leadership is essential in guiding institutions through digital transformation. Drawing on classroom observations from a Malaysian university and supported by current scholarship, the study identifies three critical challenges: gaps in digital competency, AI literacy, and ethical awareness. The ethical leadership framework is employed to analyse institutional responsibilities and highlight the importance of transparency, inclusivity, and moral reflection in technology adoption. Through a review of literature, field-based insights, and theory-led interpretation, this paper proposes practical recommendations for building AI literacy, designing authentic assessments, and embedding ethical reflection into academic life. The findings emphasise that digital transformation without ethical guidance risks undermining the core values of education.

1. Introduction

The arrival of artificial intelligence in higher education has prompted a fundamental rethinking of teaching, learning, and institutional operations. What were once pilot initiatives have become mainstream in many campuses, influencing everything from grading systems to strategic planning [24]. This transformation has altered how knowledge is created, shared, and recognised. In the rush to implement AI, however, core questions about values, purpose, and the human dimension of education have been sidelined [26,34].

AI tools promise efficiency and customization, yet their use often proceeds without sufficient ethical reflection. Algorithms powering assessment, student recommendation systems, and learning

* Corresponding author.

E-mail address: tinst@tarc.edu.my

platforms operate in unseen ways that can affect learners' experiences and outcomes without human validation [8,14]. These hidden processes raise serious concerns about fairness, transparency, and institutional accountability [30].

Across classrooms, lecturers experience pressure to adapt or risk falling behind, often without clear ethical guidance or training [6]. Students, too, use automated writing tools frequently while lacking understanding of their limitations or how to use them ethically [25]. Reports from the United Kingdom indicate that cheating cases involving AI more than tripled (from 148 to 482 cases) between 2022 and 2024 [29], making institutional oversight a matter of urgency.

Ethical leadership has emerged as a critical response to these challenges. Brown and Treviño present it as more than rule setting. It is about role modelling ethical behaviour, encouraging collective reflection, and guiding institutions toward fairness and responsibility. This model has proven effective in settings where technology raises unforeseen dilemmas [5].

This paper examines how ethical leadership can provide a guiding framework amid rapid AI adoption. It addresses the gaps in educator preparation, student understanding, and institutional policy. It offers strategies rooted in transparency, inclusion, and moral reasoning. Drawing on experiences from the Malaysian higher education sector, it contributes to global conversations on how universities can uphold human values while embracing digital transformation.

2. Literature Review

Scholarship on artificial intelligence in education has grown significantly in recent years, examining its effects on pedagogy, policy, and student behavior. Williamson and Eynon suggest that while AI can streamline administrative tasks and support instruction, it often disrupts foundational educational values such as critical thinking and academic integrity [34]. Selwyn adds that the opaque nature of algorithmic decision-making in learning platforms poses risks to the fairness and transparency of student evaluation [24].

Concerns about academic integrity are widespread. Research shows that AI writing tools are being misused in ways that raise ethical dilemmas around acceptable use [14,28]. A systematic review across 41 studies identified generative AI as a key factor in rising plagiarism and cheating incidents since 2021 [18,26]. In Bahrain, a study of 203 university staff and students found that ethical guidance and policies were weak predictors of academic outcomes, indicating the critical need for integrity frameworks [15].

Western-centric bias in AI training data has also received attention. Crawford warns that global AI systems can marginalize non-Western knowledge [8]. Research into language-learning AI tools shows minority student participation dropped by over 30 percent when biases became apparent [17]. This aligns with findings from cultural bias evaluations of large language models, which show that model performance often favors dominant cultural norms [20].

Trust in AI tools depends heavily on transparency and accountability. Shin links trust to the clarity of AI decision processes, while Azeem and Abbas point to the dangers of reliance on AI for academic tasks [3,26]. They found a correlation between generative AI use and reduced academic self-esteem among students. Viberg *et al.*, surveyed 508 teachers across six countries, concluding that higher confidence and cultural sensitivity increased teacher acceptance of AI technologies [33].

Ethical leadership emerges as a crucial framework for addressing these issues. Brown and Treviño's model emphasize integrity, consistency, and stakeholder inclusion in ethical decision-making [5]. Holmes *et al.*, extend that framework by highlighting its relevance in building teacher confidence and policy clarity in AI adoption [14]. A review of responsible AI in K-12 and higher education suggests human-centered values are essential [11].

Recent recommendations emphasize ethically grounded education. Educause suggests that assessment models should adapt to focus on authentic, student-generated artifacts that cannot be replicated by AI [10]. In 2025 Business Insider reported that educators are shifting to discussions and oral presentations to discourage indirect AI misuse. These sources reinforce that technical solutions alone are insufficient without ethical guidance and institutional support.

These perspectives collectively support this paper's central argument: ethical leadership must guide AI integration, bridging gaps in educator capacity, student awareness, and policy coherence. This leadership model aligns with the values needed to safeguard integrity and inclusion during rapid digital transformation.

3. Critical Issues in AI Integration

AI adoption in higher education has opened new possibilities but also created significant structural and cultural issues. Universities often prioritise technical adoption over thoughtful implementation. As a result, three connected challenges have emerged: competency gaps, literacy deficiencies, and ethical uncertainty.

3.1 Competency Gap

Many educators feel unprepared for the rise of AI in teaching, grading, and curriculum design. Zawacki-Richter *et al.*, note that lecturers often receive little training on how AI systems work or how to critically assess their use [35]. Selwyn adds that institutional support tends to arrive late and lacks relevance to the specific needs of different departments [24]. A systematic review confirms that instructors still struggle to integrate AI in ways that align with established instructional models such as TPACK [21]. UNESCO developed an AI Competency Framework for teachers to guide institutional training but uptake remains uneven [32]. Without these supports, educators may rely on AI for convenience, weakening trust and disrupting coherent learning experiences. Competency also requires reflective judgment about when AI should be used and when human teaching is irreplaceable. When educators fail to make such distinctions, it can confuse learners and undermine the credibility of institutional standards. In some cases, the lack of technical proficiency leads to full dependency on pre-packaged solutions, limiting educational creativity and responsiveness.

3.2 Literacy Gap

Digital literacy in higher education often remains reduced to basic technical skills. Castañeda and Williamson argue that this narrow view fails to prepare students for intelligent, adaptive systems [6]. Long and Magerko propose that genuine AI literacy includes the abilities to understand, use, evaluate, and critically reflect on AI applications, what some calls "use and apply" and "evaluate and create" competencies [18,20,21]. When students use AI tools without awareness of their limitations or biases, they risk superficial understanding and ethical disengagement [26]. Educators themselves require comparable literacy to guide students, yet many current practices do not support this progression [33]. Digital literacy also intersects with socioeconomic inequalities. In institutions with resource constraints, students and faculty may lack access to high-quality AI tools and training, further compounding the digital divide. Without targeted investment, the benefits of AI integration will remain confined to well-funded institutions, exacerbating inequalities within the education sector.

3.3 Ethics Gap

The rapid integration of AI has exposed inadequacies in institutional policies. Holmes *et al.*, observe that many university guidelines are either outdated or vague, leading to inconsistent discipline practices [14]. Azeem and Abbas found a link between unclear ethics protocols and rising incidents of AI-assisted academic dishonesty [3]. Brown and Treviño stress that institutions must move beyond ad hoc rules and build cultures of ongoing ethical reflection [5]. Participation of students, educators, administrators, and researchers is essential to develop policies that are relevant and adaptive. Studies support that ethical frameworks need regular review to address new AI capabilities and changing expectations [9]. Ethical gaps also manifest in the design of AI tools themselves. Crawford highlights that many AI systems rely on training data embedded with Western cultural norms, which may not reflect local values or educational priorities [8]. When institutions adopt these tools without questioning their embedded assumptions, they risk marginalising local epistemologies. This raises broader concerns about decolonising digital education and ensuring that AI integration is culturally responsive. In addition, ethical uncertainty has prompted different faculty responses, from open rejection of AI use to uncritical acceptance. This inconsistency affects students' trust and creates confusion around acceptable academic behaviour. Institutions must prioritise transparency, consistency, and student engagement in order to rebuild ethical clarity in the face of technological change.

4. Theoretical Framework

This section is grounded in the ethical leadership framework articulated by Brown and Treviño, who argue that leaders play a vital role in shaping organisational norms through consistent moral conduct and principled decision-making [5]. Within the higher education sector, where artificial intelligence continues to alter institutional processes, this leadership model has become increasingly relevant. As algorithmic systems gain influence over student evaluations, administrative planning, and content delivery, ethical leadership must address how these tools reshape academic relationships and institutional culture [14].

Ethical leadership does not rely solely on personal integrity. It involves a structured commitment to embedding ethical norms within institutional routines. This commitment requires decision-makers to remain transparent in how digital systems are deployed, particularly when such systems influence grading, attendance monitoring, or risk prediction. Shin highlights the importance of accountability, arguing that without open explanation of how decisions are made through AI, trust within the institution begins to deteriorate [26]. Where students and faculty do not understand the purpose or function of algorithmic processes, perceptions of fairness are easily disrupted.

An essential component of ethical leadership in digital transformation is responsiveness to social and cultural complexity. Castañeda and Williamson argue that many AI tools are developed using datasets that lack cultural representativeness [6]. These limitations risk reinforcing inequalities if institutions adopt technology without critical scrutiny. Williamson and Eynon further caution that digital infrastructure can reflect and reproduce existing power hierarchies unless checked by inclusive leadership practices [34]. Educational leaders must not assume neutrality in technology. Instead, they are responsible for inviting diverse voices into policy discussions, ensuring that policies reflect the lived realities of students, faculty, and marginalised communities.

Another foundational principle within this theoretical framework is the institutionalisation of ethical dialogue. Holmes *et al.*, argue that effective leaders create spaces where faculty and students can question emerging practices and contribute to shared understandings of ethical norms [14]. This

does not imply crisis management alone. Rather, it implies the ongoing integration of ethical reasoning into everyday decisions. Reflection should become part of administrative processes, staff development, curriculum design, and student engagement activities. Moral concerns related to authorship, data collection, surveillance, and bias require proactive dialogue rather than reactive rule-making.

Recent scholarship supports the idea that ethical leadership must also be tied to broader discussions about digital trust and institutional legitimacy. Trust is not only about the accuracy of algorithms but also about whether institutional leaders are seen as acting in good faith. According to Fricker, trust in technological systems must be cultivated through repeated, visible actions that demonstrate fairness and clarity [13]. Leaders who model these behaviours can influence the wider institutional climate, ensuring that the introduction of AI is seen not as imposition, but as collaboration.

In the context of Malaysian higher education, these theoretical insights provide a valuable lens for understanding the uneven adoption of AI. Ahmad *et al.*, observe that institutional responses to technology in the region have often lacked ethical planning, focusing instead on output targets and global rankings [1]. This observation underscores the importance of integrating ethical leadership into national education strategies, especially where regulatory guidance remains limited or fragmented. A grounded ethical leadership approach offers a foundation for resisting uncritical adoption and for ensuring that AI serves educational purposes without diminishing human dignity or academic freedom.

5. Case Illustration

This section draws on a series of classroom observations conducted over 64 tutorial sessions involving total of 322 second-year students from January to May 2025 at a private Malaysian university located in the Klang Valley. The sessions were part of an undergraduate business ethics course attended by second-year students. Each session lasted approximately 30 minutes and was observed directly by the tutor, who documented student responses, behaviours, and follow-up discussions through handwritten field notes and post-class reflective memos.

During a segment dedicated to digital ethics, students were asked whether they had used artificial intelligence tools such as ChatGPT in their coursework. A significant majority raised their hands and spoke candidly about their experiences. Their responses reflected comfort and confidence, with several students sharing that these tools helped them complete assignments efficiently and provided quick access to content. However, when asked whether they had received any formal instruction on responsible or ethical usage of these tools, there was a noticeable pause. Only a small number of students, specifically 16 out of 322, reported having received any formal guidance on responsible or ethical AI usage from their faculty or institution. The majority remained silent when asked about this issue, and many looked around hesitantly, indicating discomfort and uncertainty. The detail of the observation as shown in Table 1 and illustrated in Figure 1.

Table 1

Summary of student responses and behaviours related to AI usage

Observation Aspect	Details
Observation Period	January to May 2025
Number of Sessions Observed	64 tutorial sessions
Number of Students Observed	322
Session Duration	30 minutes per session
Student Year Level	Second-Year Students
Observation Location	Private University, Klang Valley
Observation Method	Handwritten field notes and reflective memos
AI Tool Usage Response	320/322 (99.37%)
Common Responses to AI Usage	Completed assignments efficiently (94.41%) Accessed content quickly (93.47%) Generated ideas or outlines for assessment (96.89%) Checked grammar and sentence structure (84.16%) Translated content into simpler language (82.91%) Used as a tutor to explain content (77.95%)
Students Reporting Proper Ethical Guidance on Usage of AI	16/322 (4.96%)

AI Usage Pattern Among Students (Jan-May 2025)

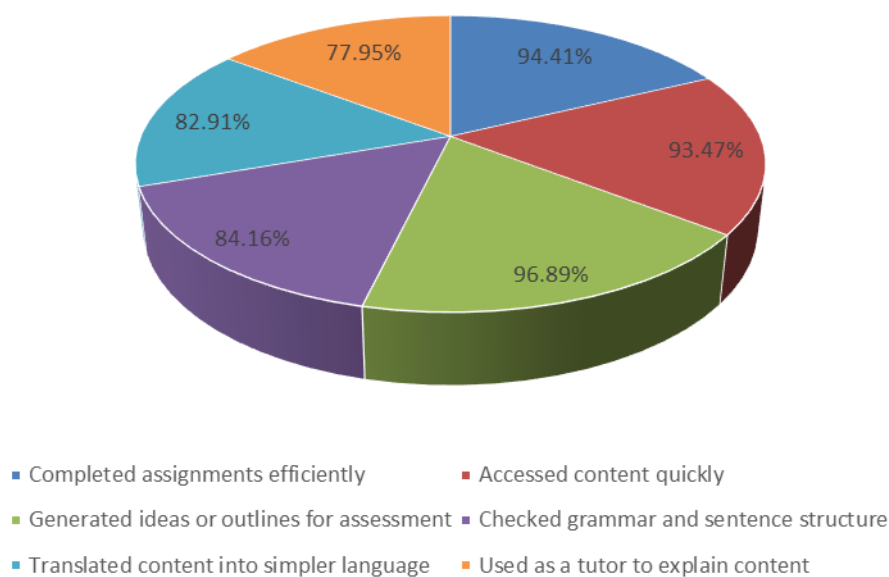


Fig. 1. AI Usage patterns among second-year university students (January–May 2025)

This repeated classroom scenario highlights a critical oversight. While students are not hesitant to embrace new technologies, they lack the institutional scaffolding needed to develop ethical awareness. Selwyn has pointed out that without ethical orientation, digital adoption risks promoting surface-level engagement at the expense of intellectual depth and academic accountability. The students in these sessions did not show intent to deceive [24]. Rather, they had normalised the use of AI tools in the absence of clear policies, ethical guidelines, or structured discourse.

This observation points to a larger institutional shortcoming. The absence of ethical framing leaves students to rely on informal norms or peer advice. Williamson and Eynon argue that when ethical education is treated as optional or postponed, institutions create a vacuum in which

automation is accepted without question [34]. This can lead to the erosion of critical thinking and a weakening of academic identity.

Furthermore, similar concerns emerged across other faculties during informal discussions with teaching staff. Many educators expressed uncertainty about how to address the ethical dimensions of AI tools in their courses. Without centralised policy or training, the burden shifts to individual lecturers, creating fragmented practices. Holmes *et al.*, stress that in such scenarios, inconsistent messaging undermines institutional credibility and puts students at risk of unintentional misconduct [14].

The case of these Malaysian students reflects a larger trend in higher education. Ethical questions surrounding artificial intelligence cannot be postponed or handled in isolation. They must be embedded within classroom routines, institutional dialogues, and policy structures. Institutions that fail to do so risk producing graduates who are technologically proficient but ethically unprepared to confront the social responsibilities that come with digital fluency.

6. Discussion

Ethical leadership plays a critical role in addressing the growing complexity linked to artificial intelligence within higher education. As digital tools reshape how institutions assess, teach, and manage, leaders must make decisions with both operational and moral implications. Brown and Treviño explain that ethical leadership goes beyond compliance [5]. It includes consistent actions that uphold fairness, accountability, and responsibility across all layers of an organisation.

In educational contexts, this leadership model supports decision-making where clear ethical guidance is often lacking. Holmes *et al.*, emphasise that AI systems cannot be expected to behave ethically on their own [14]. It is the ethical commitment of those who deploy and supervise these systems that will determine whether they reinforce or erode institutional values. Therefore, universities must move from reactive rule-setting to proactive leadership strategies that shape a transparent and inclusive culture.

A central concern lies in the erosion of trust. As institutions introduce AI tools, both students and lecturers want to understand how these technologies operate and how their use will affect academic experiences. Trust diminishes when systems are adopted without discussion or when policies are vague. Shin notes that uncertainty surrounding algorithmic operations discourages engagement and heightens anxiety [26]. Trust can only be maintained when communication is open, expectations are clear, and feedback is welcomed.

Several studies have pointed out that ethical leadership is especially important when technology intersects with social identity. For example, Williamson and Eynon argue that AI tools tend to reflect the perspectives of dominant cultural groups [34]. If institutions adopt these tools without careful contextual review, they risk marginalising students whose experiences and languages are not adequately represented in training data. Castañeda and Williamson stress that leadership must confront these biases directly [6]. Policies that fail to address systemic inequities will reinforce exclusion, no matter how advanced the technology appears.

Ethical leadership also involves cultivating an institutional culture where moral reflection is embedded in everyday practice. Holmes *et al.*, suggest that ethical decision-making must become a shared activity, not one that is restricted to management or legal departments [14]. This includes routine discussions within faculties and student bodies about issues such as data ownership, authorship, surveillance, and bias. Moral reasoning should not be limited to emergencies or controversies. Instead, it should be part of the university's normal rhythm of teaching and governance.

Recent research has extended these ideas to include ethical competence as a leadership responsibility. Aoun argues that leaders must ensure institutions are developing humanistic competencies alongside technological fluency [2]. Without efforts to align AI integration with broader educational values, technology may become a tool of administrative convenience rather than a support for learning. Leaders must therefore balance innovation with reflection, ensuring that human dignity remains central to institutional priorities.

Zawacki-Richter *et al.*, provide further insight into the practical responsibilities of leadership in this area [35]. Their study highlights the importance of investing in structured capacity building. Educators need more than technical instructions. They require ethical orientation, community support, and space to question dominant narratives about efficiency and automation. One-off training sessions or occasional briefings are not sufficient. Institutions need long-term frameworks for staff and students to build ethical awareness.

The discussion also highlights the importance of shared responsibility. Students often engage with AI tools in informal ways long before their use is addressed in coursework. As shown in the earlier case illustration, many students operate in an ethical vacuum. This reinforces the need for institutional frameworks that include student voices in shaping ethical norms. Prinsloo and Slade emphasise that participatory policy development fosters a deeper sense of ownership, clarity, and accountability [36].

Ethical leadership is not a static function. It evolves with technological change and responds to shifts in student behaviour, faculty expectations, and societal standards. What remains constant is the responsibility to uphold the purpose of education: not merely the transfer of knowledge, but the development of reflective, responsible, and engaged human beings. Institutions that embrace this responsibility will be better positioned to lead with confidence in the face of digital transformation.

7. Recommendations

Artificial intelligence in higher education presents challenges that go beyond technical adaptation. The widespread use of generative tools, such as language models and algorithmic feedback systems, has raised urgent questions about trust, fairness, and educational integrity. Institutions must not delay in taking clear, ethical, and structured actions. The following recommendations reflect concerns raised throughout this paper and are rooted in established scholarship, institutional reports, and empirical classroom observations.

7.1 Comprehensive AI Literacy Programmes

It is no longer adequate for universities to assume that familiarity with artificial intelligence develops organically through exposure. Structured AI literacy programmes are necessary for all students and academic staff. These programmes should not only explain how such systems operate, but also address broader themes including data bias, surveillance risks, and the ethical implications of automated decisions. According to Viberg *et al.*, educators in multiple countries reported uncertainty and mistrust due to limited understanding of the algorithms behind educational AI tools [33]. AI literacy requires critical engagement, not mechanical proficiency. Zawacki-Richter *et al.*, emphasise that AI literacy should include the ability to evaluate the purpose, accuracy, and ethical dimensions of any tool being used in academic contexts [35]. Such training must be integrated into orientation modules, continuous staff development, and curricular refreshers across faculties.

Kassorla *et al.*, propose that when AI literacy becomes part of institutional culture, students are more likely to make informed and ethical decisions in their academic practices [16].

7.2 Collaborative Policy Formulation and Ethical Governance

Policy frameworks must reflect the pace and complexity of technological adoption within academic environments. Institutional guidelines that address AI use must be co-developed with diverse input, including faculty from multiple disciplines, student representatives, librarians, IT professionals, and academic integrity officers. Holmes *et al.*, caution that policies crafted solely by administrative leadership often miss critical nuances experienced in teaching contexts [14]. Chan outlines a multi-layered governance model that includes academic review boards, ethical committees, and course-level adaptation cells [7]. When decision-making is shared and inclusive, there is greater legitimacy and compliance among institutional members. The absence of such collaboration can result in inconsistent rules across faculties, leading to confusion and erosion of ethical standards.

7.3 Assessment Redesign Grounded in Authentic Learning

The structure of academic assessment must be critically revisited in light of how generative AI tools influence student submissions. Standardised written assessments and structured problem-solving tasks are increasingly vulnerable to manipulation or overreliance on automation. In contrast, assessments that are situated in personal experience, require iterative reflection, or involve collaborative engagement tend to preserve originality and integrity. Qi Xia *et al.*, demonstrate that when assessment design shifts to include metacognitive reflection and learner narrative, students show higher ethical awareness and reduced dependence on AI outputs. Authentic assessment is not simply a different method [23]. It is a pedagogical stance that values process over output, and it demands thoughtful alignment with learning outcomes. Breazeal suggests that institutions that embed ethics within assessment rubrics send a clearer signal about what they value and how they expect students to engage with technology responsibly [4].

7.4 Integration of Digital Ethics Across Curricula

Ethical reflection cannot be confined to one-off lectures or separate modules in philosophy or law. All academic disciplines have an obligation to consider how automation, data, and algorithmic tools affect their fields. Selwyn argues that students who encounter ethical thinking only in isolated settings may fail to connect these ideas to their professional or disciplinary identity [24]. Breazeal supports the integration of ethics across computing, business, healthcare, and arts curricula as a foundational requirement [4]. The goal is to normalise ethical reasoning as a routine part of university learning. When students are encouraged to interrogate technologies as part of biology labs, design studios, or economics seminars, they develop a more sophisticated understanding of the responsibilities that accompany innovation.

7.5 Institutional Encouragement for Responsible Pedagogical Experimentation

Lecturers who wish to incorporate AI in teaching often do so without adequate institutional support. While some experiment with AI chatbots or analytics tools, many are uncertain about potential risks or lack platforms to share their experiences. Educators need structured spaces where

they can test tools, report failures, and discuss ethical dilemmas without fear of penalty. Faculty Focus highlights the benefits of peer-to-peer learning circles where instructors review AI-enhanced assignments and discuss outcomes in a confidential setting [12]. Holmes *et al.*, observe that institutional culture significantly shapes how educators perceive ethical risk [14]. When institutions reward reflective experimentation rather than penalise unfamiliarity, educators become active participants in shaping ethical standards from within the system. Educause notes that leadership must allocate dedicated time and resources for such experimentation and recognise it as a legitimate form of scholarly teaching [9].

7.6 Periodic Auditing and Ongoing Review Mechanisms

Ethical oversight should not end with policy formulation or one-time training. Universities need ongoing mechanisms for reviewing how AI tools are used, how policies are applied, and how students and faculty experience these changes. Perkins *et al.*, recommend structured audits that include student feedback, tool effectiveness, and alignment with institutional values [22]. UNESCO outlines principles for ethical audits that consider inclusiveness, data protection, and academic fairness [31]. Institutions must assign responsibility for these reviews to dedicated units, such as centres for academic integrity or digital ethics taskforces. These groups should meet regularly, issue public reports, and advise faculties on updates. This process not only ensures accountability but also builds trust across academic communities.

8. Conclusion

The integration of artificial intelligence into higher education cannot be treated as a neutral or purely technical development. It carries significant implications for academic values, student identity, and institutional trust. This study has shown that ethical leadership offers a viable pathway for addressing the challenges posed by AI in the classroom and beyond. Institutions must recognise that ethical questions do not emerge after digital implementation. They exist at every stage of decision-making and require consistent reflection, collaboration, and communication. The recommendations presented here stress the importance of shared responsibility, inclusive policy design, and the development of context-aware literacy programmes. When institutions engage critically and collectively with AI technologies, they protect the foundational principles of education and prepare their communities for an uncertain digital future.

Acknowledgement

This research was not funded by any grant. However, the author wishes to express sincere gratitude to the Faculty of Accountancy, Finance, and Business (FAFB) at Tunku Abdul Rahman University of Management and Technology (TAR UMT) for its support. Profound appreciation is also extended to the second author, Jiahui Yong, for her professional insights and the knowledge shared from her expertise.

References

- [1] Ahmad, Sayed Fayaz, Heesup Han, Muhammad Mansoor Alam, Mohd Rehmat, Muhammad Irshad, Marcelo Arraño-Muñoz, and Antonio Ariza-Montes. "Impact of artificial intelligence on human loss in decision making, laziness and safety in education." *Humanities and Social Sciences Communications* 10, no. 1 (2023): 1-14. <https://doi.org/10.1057/s41599-023-01842-4>
- [2] Aoun, Joseph E. *Robot-proof: higher education in the age of artificial intelligence*. MIT press, 2017. <https://doi.org/10.7551/mitpress/11456.001.0001>

- [3] Azeem, M., & Abbas, H. (2025). Ethical uncertainty and AI-assisted academic misconduct: A quantitative inquiry. *Journal of Academic Ethics*, 23(2), 122–138. <https://doi.org/10.1007/s10805-024-09452-9>
- [4] Breazeal, C. (2023). Designing AI literacy for interdisciplinary education. *AI & Society*, 38(3), 421–437. <https://doi.org/10.1007/s00146-024-01946-8>
- [5] Brown, Michael E., and Linda K. Treviño. "Ethical leadership: A review and future directions." *The leadership quarterly* 17, no. 6 (2006): 595–616. <https://doi.org/10.1016/j.leaqua.2006.10.004>
- [6] Castañeda, L., & Williamson, B. (2021). Assembling evidence for educational AI: Reframing AI literacy as sociotechnical competence. *British Journal of Educational Technology*, 52(4), 1613–1627. <https://doi.org/10.1111/bjet.13123>
- [7] Chan, T. C. (2023). Towards ethical governance in AI adoption: Models from Asian universities. *Asia Pacific Education Review*, 24(1), 43–60. <https://doi.org/10.1007/s12564-023-09876-4>
- [8] Crawford, Kate. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. New Haven: Yale University Press, 2021.
- [9] Educause. *Responsible Use of AI in Higher Education: Recommendations for Leaders*. Educause, 2024. <https://doi.org/10.1145/3430368>
- [10] Educause. *Authentic Assessment in the Age of AI: A Guide for Institutions*. Educause, 2025. <https://doi.org/10.1145/3649165.3690117>
- [11] Eynon, Rebecca, and Erin Young. "Methodology, legend, and rhetoric: The constructions of AI by academia, industry, and policy groups for lifelong learning." *Science, Technology, & Human Values* 46, no. 1 (2021): 166–191. <https://doi.org/10.1007/s43681-021-00019-3>
- [12] Faculty Focus. (2023). Peer learning networks for AI pedagogy: Building ethical confidence in practice. <https://doi.org/10.1145/33138331.3376727>
- [13] Fricker, M. (2021). *Epistemic injustice and algorithmic authority*. Oxford University Press.
- [14] Holmes, W., Bialik, M., & Fadel, C. (2021). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
- [15] Kadayam Guruswami, G., Mumtaz S., Gopakumar A., Khan E., Abdullah F., and Parahoo S. K. "Academic Integrity Perceptions Among Health-Professions' Students: A Cross-Sectional Study in the Middle East." *Journal of Academic Ethics* 21, no. 2 (2023): 231–249. <https://doi.org/10.1007/s10805-022-09452-6>.
- [16] Kassorla, I., Nguyen, T., & Paredes, R. (2024). Institutional AI literacy: What works? *International Journal of Educational Technology in Higher Education*, 21(1), 17. <https://doi.org/10.1186/s41239-024-00485-5>
- [17] Lewis, R. D. (2025). Cultural exclusion in AI-assisted language education: Evidence from Southeast Asia. *Computers and Education: Artificial Intelligence*, 6, 100093. <https://doi.org/10.1016/j.caeai.2025.100093>
- [18] Long, D., & Magerko, B. (2020). What is AI literacy? Competencies and design considerations. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1–16). <https://doi.org/10.1145/3313831.3376727>
- [19] MDPI. (2024). Trends in AI-based plagiarism detection and its limitations. *Education Sciences*, 14(2), 187. <https://doi.org/10.3390/educsci14020187>
- [20] Nature Communications. (2025). Defining digital literacy in AI-integrated classrooms: A global framework. *Nature Communications*, 16, 214. <https://doi.org/10.1038/s41467-025-06278-4>
- [21] Nguyen, Thi Huyen, Nguyen Phuong Lien, and Pham Thu Thuy. "Challenges of AI in Education: A Systematic Review." *IOSR Journal of Research & Method in Education (IOSR-JRME)* 15, no. 3 Ser. I (May–June 2025): 37–46. <https://www.iosrjournals.org/iosr-jrme/papers/Vol-15%20Issue-3/Ser-1/F1503013746.pdf>.
- [22] Perkins, R., Shibata, N., & Lam, J. (2023). AI ethics audits in higher education: Building trust through transparency. *Journal of Technology and Society*, 18(4), 233–248. <https://doi.org/10.1145/3430368>
- [23] Qi Xia, C., Tan, H., & Mohd Fadzil, M. (2024). Metacognitive assessments in the age of AI: Preventing generative misuse in Malaysian universities. *Asia Pacific Journal of Education*, 44(1), 55–72. <https://doi.org/10.1080/02188791.2023.2123456>
- [24] Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.
- [25] Shahazwan Mat Yusoff, A., Norazah Mohd Suki, & Lee, C. T. (2023). Malaysian students' perception and ethical use of AI writing tools. *Malaysian Journal of Learning and Instruction*, 20(1), 89–105. <https://doi.org/10.24135/mjli.v20i1.320>
- [26] Shin, D. (2020). User trust in algorithmic decisions: The role of transparency and perceived fairness. *Telematics and Informatics*, 54, 101457. <https://doi.org/10.1016/j.tele.2020.101457>
- [27] Smith, L., & Patel, M. (2023). Generative AI in student misconduct: A systematic review. *Journal of Academic Ethics*, 21(2), 93–112. <https://doi.org/10.1007/s10805-023-09437-2>

- [28] te Ønnes, B., & Brown, A. (2022). Machine learning and plagiarism: Emerging patterns in student submissions. *Educational Technology Research and Development*, 70(4), 925–944.
<https://doi.org/10.1007/s11423-022-10048-9>
- [29] The Guardian. (2025, March 2). UK universities see spike in AI-related cheating.
<https://www.theguardian.com/education/2025/mar/02/uk-universities-ai-cheating>
- [30] UNESCO. (2021). AI and education: Guidance for policy-makers. <https://doi.org/10.97892/3/186292e>
- [31] UNESCO. (2022). Recommendation on the ethics of artificial intelligence. <https://doi.org/10.97892/3/386113>
- [32] UNESCO. (2024). AI competency framework for teachers. <https://doi.org/10.97892/3/407924>
- [33] Viberg, O., Hatakka, M., Bälter, O., & Mavroudi, A. (2023). Teachers' acceptance of AI in education: An international study. *Educational Technology & Society*, 26(1), 89–104. <https://doi.org/10.1145/3649165.3690117>
- [34] Williamson, B., & Eynon, R. (2020). Historical threads, missing links, and future directions in AI and education. *Learning, Media and Technology*, 45(3), 223–235. <https://doi.org/10.1080/17439884.2020.1798995>
- [35] Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 39. <https://doi.org/10.1186/s41239-019-0171-0>
- [36] Prinsloo, Paul, and Sharon Slade. "Building the learning analytics curriculum: Should we teach (a code of) ethics?." In *CEUR Workshop Proceedings*, vol. 1915. 2017.