Ethical Governance of Generative and Research-Support Artificial Intelligence Tools in Higher Learning Institutions

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Abstract
This study explored the ethical governance of generative and research-supported Artificial Intelligence (AI) tools in Higher Learning Institutions (HLIs). Using secondary sources, the study found data privacy and protection, avoiding misuse and harm to participants, fairness, and bias awareness, academic and research integrity, accuracy and verification, and human accountability and transparency as ethical principles for effective AI. The study concludes that institutions must support a Human-AI collaborative approach, maintain academic integrity, and promote critical thinking and problem-solving to discourage over-reliance on and bias in the use of AI tools. Consequently, the study recommends HLIs to strategize on establishing clear AI Ethics Review Boards, guidelines, and policies to facilitate macro awareness among educational stakeholders on ethical usage of AI tools for academic integrity.

Keywords: Generative and research-support AI, ethical governance, higher learning institutions

1. Introduction

Artificial Intelligence (AI) is the replication of human intelligence in machines that are taught to reason and behave like humans (Gweon & Kim, 2023). This term is commonly used by academia when discussing machines with characteristics similar to those of the human mind. The genesis of AI manifested from Intelligent Assisted Instruction for enhancing student-initiated learning processes for significant students' material understanding and problem-solving skills globally (Limna et al., 2022). AI tools offer a rich setting for accessing potential information that is beneficial for enhancing the active teaching and learning process among the students and their academic staff. The AI integration transformed the mindset of academicians from experimental "chatting" to institutional for monitoring the demographic pressures and searching the AI database for transforming quality academic access and leadership dynamics (Kabanda, 2025). The recent innovative technology brought significant changes in skills, knowledge, and attitudes to enhance innovative teaching and learning processes (Rudik & Onyshchuk, 2024). This indicates that AI tools are expected to facilitate the process of teaching and learning by taking on board the key stakeholders, such as students, academic staff, administrators, and management.

The major AI tools found in HLIs include, but are not limited to, Educational Management Information (EMIS) to resolve issues relating to admissions and enrollment by processing thousands of applicants (Fujo et al., 2024). Likewise, the Institutional Governance and Admin AI that contains Mindifyi/ EduMaster, which automates Timetabling and Resource Allocation, and Chatbots for Student Services to reduce administrative burden on staff (Mbuya, n.d), for example, the Tanzania Institutional Resource Assistant is usefully AI-support for enhancing administrative core activities. On the other hand, Learning Management Systems (LMS*)* with AI integration, which include Moodle AI-Enhanced, Canvas & Smart board, and Google Classroom. This stimulates the expansion of the scope of teaching and learning, as students learn from their work/home place through connected devices without depending on the physical campus/classroom. This ensures a real-time data collection on students' progress, which depicts a high level of feedback resulting from an active teaching and learning process (Yadav, 2025). The blended learning facilitates a high continuity of the learning process and the keeping of students' records through LMS-Driven Machinery.

However, the current study focused on the exploration of the ethical usage of Generative and Research – Support AI tools. The academicians consider ChatGPT, Gemini (Google), ResearchRabbit/Elicit, Humata AI, ChatPDF, Grammarly/QuillBot, Julius AI, and NVivo AI Modules for improving the teaching and learning strategies (Okamoto, 2025). Additionally, the aforesaid tools are useful for brainstorming, essay structuring, and simplifying research papers, and refining language structure by carrying out the initial stage of the editorial process before publication. In addition, AI tools can perform thematic analysis of qualitative data gathered from respondents and ensure quality assurance and plagiarism, as the academia employs Turnitin software, with AI Detection to ensure academic integrity by ensuring that there is so-called Human-AI collaboration rather than AI-Plagiarism (Saleh & Hassan, 2025). Based on the

significant role of AI tools brought a concern among the educational gurus as diminish human aspect of teaching and learning strategies. The ongoing debate prompted the current study to be carried out on the ethical use of generative-AI tools for enhancing students and academic staff on their academic writing.

2. Research Objective

To explore the ethical principles for governing the effective utilization of AI tools

3. Ethical Principles for Governing the Effective Utilization of AI Tools

This entails the effective utilization of AI tools on integrity, fairness, and responsibility.

3.1 Privacy and data protection. This is a significant ethical standard for using AI tools by avoiding exposing confidential, personal, and sensitive data without permission. Data ownership and informed consent are protected by AI usage regulations, and thus infringe the right of individual participants of the study. Yanamala et al. (2024) insisted on enhancing a balance of AI innovation alongside data privacy and protection by using robust regulatory measures that maintain confidentiality of individual rights. This can be achieved through the adaptation of a consent framework to align with the rapid technological growth and societal needs. Nguyen (2025) emphasizes the ethical usage of AI tools that are grounded in established principles to facilitate the effective teaching and learning process and support human creativity, critical thinking, and problem-solving without the replacement of human intelligence.

3.2 Avoid misuse and harm. AI tools should not be used to deceive, plagiarize, manipulate, or automate unethical behavior by generating harmful content with the intention of harassing and issuing deep fakes and misinformation to the AI audience. Scholz (2024) pinpointed that HLIs must focus on creating a conducive environment that secure AI generated materials by streamlining preventive data leakage, which is capable of accommodating AI risks such as misuse, misapplication, misrepresentation, and misadventure. This implies the necessity for institutions to minimize potential harms and misuse of AI-generated content by establishing a comprehensive framework for assessing the tools before reaching the final consumers.

3.3 Fairness and bias awareness. It's important to note that AI systems may lead to societal biases, especially in terms of language, conclusions, and recommendations. Pulivarthy and Whig (2025) acknowledge the management of bias and fairness in the utilization of AI resources to enhance trustworthiness, equality, and equity. It's essential to avoid using AI outputs to justify discrimination and exclusion in decision-making. A useful mitigation for addressing the fairness and bias awareness has been noted by González-Sendino (2023) that administering fair governance and continuous training programmes to AI tool users fosters the process of resampling, fair representation, regularization, and equalized odds. This implies HLIs are supposed to offer premium AI services equally to enable all students, academic and non-academic staff, regardless of their ability to pay for AI tools. Offering AI technologies only to paying students increases inequalities and thus limits inclusive utilization of datasets for enhancing academic integrity.

3.4 Academic and research integrity. To keep the originality of data in the research writing process, AI tools should assist in thinking and brainstorming rather than substitute for it to create room for fabricating data, citations, and results. This can be facilitated by following the respective institutional and journal publishers' policies to close the gap between human writers and AI tools (Huston, 2025). For instance, the course instructor is permitted to approve the usage of an AI tool like ChatGPT in coursework for active classroom engagement. HLIs must address clear guidelines for citing AI-generating materials that shows acceptability of AI usage in assessment and research practices to prevent academic misconduct. The institutions must adhere to relevant laws, regulations, and policy standards through enhancing data usage privacy and security regulations, complying with copyright and intellectual property laws, having clearly stipulated policies, guidelines on ownership of AI –generated material, and establishing AI ethics review boards for students, academic, and non-academic staff.

3.5 Accuracy and verification. AI-generated ideas are treated as preliminary drafts or hypotheses and not facts with maximum evidence. Khalifa and Albadawy (2024) argued on the basis of using AI tools accurately by focusing on structured expression of ideas, data-driven arguments, and logical reasoning. This calls academia to work independently on the accuracy and verification of AI tools' stipulated claims, citations, data, and conclusions. In addition, triangulation of AI-generated data with human practices is important in high-stakes careers such as medicine, law, policy, security, and education to avoid the use of wrong information in academic writing. Academia is obligated to credit original human sources and trusted databases and avoid citing AI as an authoritative source unless it's allowed and justified by a given context. Vasylyshyna et al. (2024) describe the context of AI tools usage and maintenance of academic integrity by highlighting the legal framework regarding the complementing AI-generated content with the original human sources to avoid unethical practices of granting authorship with a proper justification.

3.6 Human accountability and transparency. This can be enhanced through the establishment of AI-human collaboration, which is necessary to make moral, legal, and safety decisions instead of relying on the AI tool resources (Lechterman, 2022). The ethical consideration determinant suggests a collaborative AI tool in supporting and not replacing humans' critical thinking, problem-solving, and expert judgment. Despite the usage of AI-generated material, human beings remain accountable for the outcomes, errors, and consequences. In addition, the researcher, students, academic staff, and administrators need to be clear on the usage of AI tools in different perspectives, like research writing, brainstorming, and assignment attempting in education, and informed decision-making (Setiawati, 2025). It's also a prerequisite to acknowledge the contribution of AI, especially when used for idea generation, editing, analysis, coding, and searching of references, rather than presenting AI-generated output as a complete human-created idea.

4. Conclusion

In conclusion, the study highlights the significant ethical considerations for harnessing AI's potential based on clear principles, transparent governance, and protecting core academic values of unwavering commitment to human-centred education. The study concludes that institutions must support a Human-AI collaborative approach for generating knowledge and research writing, maintain academic integrity, and promote critical thinking and problem-solving to discourage over-reliance and biasness of using AI tools. Moreover, students' participation in classroom-based discussions and related literacy programs concerns the ethical use of AI tools to be encouraged across disciplines for the proper practice of using AI-generated content.

5. Recommendations

The study recommends HLIs to strategize on establishing clear AI Ethics Review Boards, guidelines, and policies to facilitate macro awareness among their stakeholders (students, academic staff, and administrators) to prioritize the ethical use of AI tools.

6. Ethics Declarations

Conflicts of Interest/Competing Interests

The author declares that there are no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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