Towards Ethical Artificial Intelligence Use in Lesotho Higher Education: A Benchmarking Study

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The integration of artificial intelligence (AI) has reformed pedagogical and administrative practices in education globally. Literature shows that AI provides several learning benefits due to its capability to mimic human decision-making. Consequently, ethical considerations surrounding AI usage, particularly in developing contexts such as Lesotho, remain underexplored. Following responsible research and innovation theory, this study sought to use the AI frameworks and guidelines of selected South African universities as a benchmark to inform the formulation of contextually relevant and ethically sound AI guidelines for Lesotho higher education institutions. Adapting a qualitative approach with explanatory design, the study used process benchmarking to examine the processes of high-performing universities to increase operational efficiency and implement the best practices for Lesotho higher education. Analysis yielded four themes: absence of formal ethical guidelines, limited awareness and understanding among key stakeholders, ethical risks, and discrimination for assessment. In synthesising the current state of AI guidelines and best strategies of other universities, this study lays the foundation for the development of guidelines for Lesotho higher education.

Key words: *Artificial Intelligence, Ethics, Responsibility, Policy, Guidelines, Integrity*

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Introduction

Higher education has adopted artificial intelligence (AI) due to its capability to transform various educational practices, such as learning, teaching, and assessment (Castillo-Martinez et al., 2024; Holmes et al., 2021; Kasneci et al., 2023; Luckin et al., 2016; Yan et al., 2024). These aspects need well-defined guidelines to maintain academic and pedagogical standards, ensuring that all preservice teachers (PSTs) receive a high-quality education (Holmes et al., 2021; Ka Yuk Chan, 2023). These guidelines are also central for guiding the incorporation of AI into developing the curriculum, designing assessment, and maintaining academic integrity (Plata et al., 2023; Xiao et al., 2023). Since AI tools are becoming more prevalent, there is a risk of overreliance, which can diminish the growth of critical thinking and problem-solving abilities essential for human growth (Ka Yuk Chan, 2023). All these risks necessitate an urgent need for universities to develop AI policies or guidelines that will provide PSTs with knowledge and skills that will help them work well with AI in a professional manner (Ka Yuk Chan, 2023). Preservice teachers must therefore understand the principles of AI to succeed in using it in the future. In the Global South, including sub-Saharan Africa, the uptake of AI in education is uneven but rapidly gaining momentum. This influenced initiatives such as the African Union (AU) Digital Transformation Strategy (2020–2030) to recognise AI as a key enabler of educational development (Tunjera and Chigona, 2023; UNESCO, 2021). With these principles, AI can be responsibly used by researchers, lecturers, and PSTs equally. International bodies such as UNESCO (2021), and the OECD (2022) have published principles for the ethical use of AI in education, emphasising transparency, accountability, inclusion, and respect for human rights. However, these global frameworks often lack operational guidance for implementation in localised African contexts, where cultural, political, and institutional realities differ significantly from those in the Global North (Kwet, 2022). This makes it difficult for universities to see the need for regulating AI usage, thus ignoring the risks that it brings to society.

In Lesotho, universities have begun experimenting with AI-enabled systems, particularly in the areas of monitoring PST performance, plagiarism detection, and online assessment platforms (Ministry of Education and Training, 2023; Ababio and Olatokun, 2023). The adoption of AI into higher education is not solely a reckoning that challenges the foundations of education and research but also concerns the future of work and adverse social consequences of automation that might lead to a redundant future (Katsamaks et al, 2024). Despite this emerging use, no national AI policy or sector-specific ethical guidelines currently exist in Lesotho, as individual institutions often lack internal

mechanisms to evaluate or govern AI applications. This raises serious concerns about data governance, equity, and academic integrity in an environment where digital literacy and infrastructural resources are unevenly distributed (Ababio and Olatokun 2023, 2024; Signé and Ndung'u, 2020). Furthermore, higher education in Lesotho operates within a low-resource context, which is characterised by limited access to high-speed Internet, low levels of digital preparedness among staff, and uneven policy coordination. These systemic challenges amplify the ethical risks associated with AI deployment. The absence of localised digital ethics frameworks fosters regulatory voids and risks AI misuse (Chigona, 2023). Therefore, this study explores guidelines for regulating AI usage in higher education institutions, emphasising their implications for policy formulation in Lesotho.

Without clear ethical guidelines, institutions may inadvertently adopt AI tools that reinforce bias, violate student privacy, or lead to unequal learning outcomes (Mutangana and Mhlongo, 2023). Hence, in fostering ethical practices, the study may help Lesotho to exploit the benefits of AI while minimising its risks. By focusing on a country that reflects broader regional challenges, the study contributes to ongoing debates around responsible AI use in education in the Global South while providing PSTs with knowledge and skills that will help them work well with AI in a professional manner. By synthesising the current state of AI guidelines of other universities and proposing best strategies for all stakeholders, this study contributes to the continuing discourse on responsible AI governance and lays the foundation for the development of guidelines for Lesotho higher education.

Research Questions

The following research questions guided the study:

a) To what extent are transparency, accountability, and institutional capacity-building embedded in AI governance frameworks in universities across Southern Africa?
b) Which practices can best inform the formulation of AI guidelines and institutional policies in Lesotho higher education?

Literature Review

The increasing prevalence of AI in higher education has emphasised the need to explore its use and the implications in formulating regulatory guidelines. Scholars have defined AI as the ability of digital computers to imitate intelligence inherent in humans (Castillo-Martinez et al., 2024; Roberto do Rosário et al., 2015; Stryker and Kavlakoglu, 2024). This section reviews literature in response to the aim of the study.

Existing Ethical Guidelines and Institutional Policies

The integration of AI into higher education has prompted growing global concerns regarding the need for ethical regulatory frameworks to prevent risks brought by its usage. Institutions are increasingly expected to adopt ethical guidelines that address fairness, data protection, inclusivity, and human oversight (Floridi and Cowls, 2021; UNESCO, 2023). Globally, several bodies such as the OECD and European Commission have developed principles promoting trustworthy AI, including beneficence, non-maleficence, autonomy, justice, and explicability (European Commission, 2020; OECD, 2022). Unfortunately, some countries do not use these principles. These include Lesotho, which has yet to establish a national strategy on AI, influencing higher education institutions to rely heavily on general information and communication technology (ICT) policies that do not explicitly address AI ethics (Government of Lesotho, 2025; Ministry of Education and Training, 2023; Selialia and Kurata, 2023). This policy vacuum raised questions about the extent to which institutional governance systems are equipped to regulate AI use responsibly and align with global best practices. On the other hand, UNESCO (2021) has also released guidance specifically tailored to education, calling for guidelines that warrant inclusive, pedagogically sound, and ethically deployed AI systems. It also creates what Kwet (2022) termed the *digital colonialism* dynamic, where African institutions become passive consumers of AI technologies developed elsewhere, with little control over ethical standards. This diminishes the critical thinking of PSTs since they do not acknowledge the information or content created through AI.

Recent regional initiatives, such as the African Union (2020–2030), highlight the importance of developing AI policies that are socially just and context-sensitive. Njagi et al. (2022) found that while South African universities have begun formulating institutional AI ethics guidelines, adapted guidelines state that PSTs have to treat AI as a tool that expands their knowledge, enhances critical thinking, and assists in generating ideas rather than replacing thorough research and academic rigour. This implies that PSTs must acknowledge ideas generated to avoid plagiarism. Since the information generated is not accurate, PSTs must verify it for relevance and true citations because they provide updated information that they might not be aware of. These AI-driven systems can be adapted to PSTs' learning styles, pace of learning, and knowledge levels, allowing for tailored learning paths (Zawacki-Richter et al., 2024). Similarly, lecturers can use these tools for automated feedback and assessment using AI tools such as AI‐based grading systems that offer real-time feedback, saving them time for other educational tasks while promoting formative assessment strategies (Luckin et al., 2024). These systems are essential in identifying PST weaknesses and providing targeted support. However, the adoption of such frameworks in developing countries, particularly Lesotho, remains limited and fragmented (Mhlanga, 2023).

Risk Mitigation for Bias, Privacy, Academic Integrity, and Monitoring

Academic integrity is viewed as one of the primary values in academic settings, which has prompted lack of concerns in teaching and learning. Globally, universities have established clear policies that delineate acceptable and unacceptable uses of AI tools and AI-driven code generators (University of Pretoria, 2024). They have clear definitions of what misconduct is, by classifying unauthorised use of AI tools in assessments or research as a form of academic dishonesty. They also require PSTs and researchers (staff) to explicitly state or disclose if and how AI tools have been used in assignments or researchers' publications. Even in those established universities, there are still pressing concerns about the use of AI by PSTs and lecturers regarding academic literacy and assessment reliability in those that are under-resourced since there are no clear guidelines (Jansen, 2023; Williamson and Eynon, 2020). Due to a lack of training, lecturers have remained uncertain about how to address AI-generated assignments. Lecturers are advised on how to use these guidelines to design assessments that would minimise the risk of AI misuse and emphasise the critical thinking of PSTs. As such, this necessitates the need for capacity-building and policy clarity.

According to Floridi and Cowls (2021), ethical guidelines are important to prevent algorithmic bias and data privacy violations while upholding academic integrity. This means that PSTs' rights and autonomy will be protected when AI guidelines are aligned with social and cultural values proposed by international and national bodies such as UNESCO. Studies have revealed that there are multiple challenges and unforeseen risks that policymakers have to address regarding these risks (Mokoena, 2024; Pramjeeth and Ramgovind, 2024). Literature indicates that algorithmic decision-making also has the potential to reinforce social inequality, particularly when AI systems are trained on biased or insufficient data (Binns, 2020). In low-regulation settings, where PSTs' biometric or behavioural data may be gathered without informed consent, this increases privacy hazards. It also tracks keystrokes and facial expressions, where PSTs engage with automated systems, this is particularly troubling (Knox, 2021). Additionally, by imposing automated judgments without transparency or opportunity for contextual interpretation, AI-powered evaluation systems and plagiarism detectors may jeopardise academic integrity (Aiken and Epstein, 2020). Having guidelines in place will help Lesotho higher education lecturers establish clear rules on the acceptable use of AI by PSTs to avoid plagiarism or academic dishonesty.

Transparency and Accountability in AI Decision-Making Processes

Transparency and accountability in AI decision-making processes are critical pillars for developing robust, ethical, and socially acceptable AI guidelines. These concepts ensure that AI systems are understandable, traceable, and subject to oversight, which is essential in promoting trust, fairness, and responsible use in various sectors, including education, healthcare, and governance (Floridi and Cowls, 2021). Accountability also involves assigning responsibility for AI-driven decisions and ensuring mechanisms for redress when harm occurs (Cheong, 2024). Transparency and accountability are critical components of ethical AI governance. Transparent AI systems allow users and decision-makers to understand how algorithms function, what data they rely on, and what logic underpins their recommendations or decisions (Floridi and Cowls, 2021). Lack of algorithmic transparency, which is also known as the "black box" problem, makes it difficult for institutions to assess how AI tools influence student outcomes, admissions, or disciplinary procedures (Pasquale, 2020). However, many universities globally struggle with establishing such accountability pathways, especially when they rely on third-party software providers (Katzenbach and Ulbricht, 2019). In the African context, Mbangeleli and Funda (2024) note that university administrators often deploy AI tools without internal ethical review or awareness of how these systems align with institutional mandates and national laws. Other universities in South Africa have already developed guidelines regulating the use of AI, particularly emphasising academic integrity, transparency, accountability, and institutional capacity-building (University of Pretoria, 2024). These can significantly inform and support the development of AI guidelines in universities such as Lesotho's higher education institutions. Hence, benchmarking on universities with mature AI guidelines can help Lesotho higher education institutions, develop clear guidelines that will prevent plagiarism.

Capacity-Building and Institutional Ethical Preparedness

A recurring challenge in higher education institutions, especially in the Global South, is insufficient capacity to govern AI ethically. This includes a lack of institutional frameworks, staff training, and ethical literacy among both lecturers and administrators (Mrisho 2023). In many cases, ICT departments operate in silos, while academic staff remain unaware of the implications of AI integration, particularly when tools are embedded in Learning Management Systems (LMS) or administrative processes. This means they continue to use AI without understanding the benefits and risks they have. It also implies that ICT departments work in isolation, without collaboration with other staff members, hence academic staff remain unaware of the implications of AI integration, particularly when tools are embedded in learning management systems or administrative processes. This means they continue to use AI without understanding the benefits and risks it has. By investing in staff development, PST training, digital infrastructure, and ongoing evaluation mechanisms, universities would invest in effective integration. The incorporation of professional development programmes globally serves as awareness campaigns that institutions can run on responsible AI use. Furthermore, initiatives such as ethics committees, staff development workshops, and policy dialogue forums can help raise awareness and establish collective responsibility (Yusuf et al., 2024).

Capacity-building and institutional preparedness are considered vital for governing AI, ensuring that AI use complies with regulations ethically and transparently, thereby mitigating risks and building trust. According to Stahl et al. (2021), ethical AI governance requires interdisciplinary collaboration among ethicists, computer scientists, and education specialists. According to Altinay et al. (2024), it is essential to equip PSTs with the necessary skills and knowledge to integrate AI tools into their teaching practices. The training programmes should focus on enhancing their abilities to create and implement AI-supported lesson plans emphasising personalised and interactive learning. All stakeholders have the obligation to not only make progress with cutting-edge AI technologies but also shoulder the responsibility of identifying and anticipating the potential risks it brings (Balalle and Pannitage, 2025). Academic capability should be enhanced through AI literacy and skills across all levels to empower both PSTs and lecturers to use AI tools effectively and responsibly. Lesotho's higher education institutions face additional barriers, such as low funding, limited infrastructure, and minimal AI-related regulatory oversight, all of which hinder capacity development (Abibio and Olatokun 2023, 2024). Without deliberate investment in institutional preparedness, AI adoption risks exacerbating digital inequalities and ethical oversights.

Theoretical Framework

The study draws from responsible research and innovation (RRI) theory developed by Owen et al (2013). This theory ensures that research and innovation processes are socially desirable, ethically acceptable, and aligned with the needs and values of society, based on four dimensions. The first is anticipation, which involves identifying the potential risks and unintended consequences associated with research and innovation, looking forward to how new technologies impact society. It involves building scenarios, developing foresight, and assessing the impact at an early stage. The second dimension is reflection, which emphasises the need for researchers to reflect on their own assumptions, values, and potential biases that might influence their work. The third is inclusion; it involves considering diverse perspectives (a wide range of stakeholders) in innovation and research processes and that the resulting technologies are developed in a way that is socially acceptable and beneficial. The last dimension is responsiveness, which focuses on the ability to adapt and respond to the outcomes of anticipation, reflexivity, and inclusion. It involves being considerate to make adjustments based on the new information. All four these dimensions are interconnected and should be considered together to ensure responsible research and innovation practices. The theory is relevant to the current study in that it can expose AI ethics in Lesotho in critical areas for ethical reform and inclusive governance. While AI holds promise for improving efficiency and access in Lesotho higher education, the absence of anticipatory, inclusive, reflective, and responsive mechanisms risks reproducing structural inequalities and undermining trust. Hence, creating an ethical, inclusive, and transparent AI environment can promote societally responsible innovation in developing countries such as Lesotho.

Research Methodology

This study used a qualitative research design to explore South African universities' guidelines and frameworks to benchmark contextually relevant and ethically sound guidelines for AI use in Lesotho institutions of higher learning. The study adopted a qualitative exploratory research design to investigate the nuanced, context-specific ethical dimensions of AI usage in higher education in Lesotho. Rooted in an interpretivist paradigm, the design enabled a deep understanding of how stakeholders perceive, interpret, and respond to ethical concerns surrounding AI in academic settings in order to formulate guidelines (Alase, 2021; Creswell and Poth, 2018). This qualitative approach was found appropriate given the limited existing literature on AI ethics in the context of higher education landscape in Lesotho. The sample for this study was purposively identified with relevant expertise and direct involvement in AI-related policy formulation, infrastructure, and pedagogical implementation. This non-probability method is appropriate when the goal is to gain insight from information-rich individuals with contextual knowledge (Etikan and Bala, 2017; Palinkas et al., 2015). Therefore, the sample consisted of two policy-makers, three lecturers across the Faculty of Education departments, and one director from the ICT department. These participants were selected to reflect on both strategic and operational perspectives regarding AI and ethics in the sector.

Data were collected through semi-structured interviews, which enabled a flexible yet focused conversation about the existence, adequacy, enforcement, and perceptions of ethical guidelines for AI in Lesotho's higher education institutions. This method allows researchers to explore sensitive and possible risks that can be brought by AI while enabling participants to elaborate on their experiences about policy formulation (Adams, 2020). Interviews were conducted face to face and lasted for approximately 40 minutes, depending on the availability and preference of each participant. All interviews were audio-recorded with consent and transcribed verbatim for analysis. Reflexive thematic analysis was used to explore patterns and meaning across data following a six-step approach (Braun and Clarke, 2022). The first was familiarisation with the data by reading and re-reading and annotating transcripts, which was followed by the generation of initial codes to capture the meaningful characteristics in the text. Then, similar codes were clustered to form themes, which were reviewed to ensure coherence and alignment with the research questions. Thereafter, themes were defined and named to capture the essence of each theme, and, finally, the write-up of the whole followed, where each theme was illustrated. Altogether, four themes emerged. Ethical clearance was obtained from the University of the Free State Ethics Committee. All participants provided informed consent, and

confidentiality and data protection protocols were rigorously followed in line with international ethical standards (Shaw et al., 2022).

Findings And Discussions

The development of AI guidelines for higher education institutions in Lesotho can be significantly informed and enriched by benchmarking existing AI frameworks from other universities, both globally and regionally. This benchmarking exercise highlights how existing AI guidelines address four critical pillars: academic integrity, transparency, accountability, and institutional capacity-building. The insights derived from these pillars can provide a robust foundation for AI policy formulation in the Lesotho context.

Absence of Formal AI Ethics Guidelines

The study found that there is no formal national AI policy or higher education AI ethics framework that regulates the use of AI across institutions in Lesotho. Higher education institutions are still relying on institutional ICT policies that are limited in scope because they do not guide the use of AI, leading to PSTs misusing it. Even those who use AI are still relying on outdated clauses from ICT policy, with unclear statements regarding academic integrity, and do not address the nuances of AI-generated content. This concurs with Selialia and Kurata that institutions are still relying on out-dated which do not explicitly address challenges of AI. Similarly, the findings showed that even the existing institutional documents such as strategic plans or academic integrity policies revealed no mention of AI ethics. The absence of formal institutional and national AI ethics guidelines could lead to increased risks such as academic misconduct, privacy breaches, biased decision-making, and a decline in the critical thinking skills of PSTs. This is because they would use AI without acknowledging content created through it. This necessitates the formulation of clear guidelines for teaching and learning as well as administrative tasks. Without clear guidelines, institutions may struggle to effectively integrate AI into teaching and learning, which potentially hinders educational significances and raises ethical concerns. As suggested by Owen et al. (2013), higher education institutions in Lesotho should develop AI guidelines for all stakeholders, taking into consideration the needs of society before adapting any policy. They also recommended that for effective adaptation, institutions should anticipate the potential and unintended risks that can be brought by AI. Furthermore, such policies should have clear regulatory guidelines on how to use AI. This also aligns with UNESCO (2021), that higher education institutions must have guidelines to ensure that PTSs' privacy and security are in place to prevent unwanted harm as well as vulnerabilities, ensuring that risks are avoided and addressed before adopting any guidelines.

Therefore, adaptation should align with the educational needs, taking into consideration the risks that it can bring, such as the digital divide, where PSTs who cannot afford connectivity might perform poorly compared to those who can afford it. As AI adoption increases, so too does the urgency to address these gaps through inclusive, locally relevant ethical frameworks. The study further revealed concerns over student monitoring and academic fairness, where those who have no or limited access to technology are unfairly treated in terms of rating performance. This is confirmed by Chigona (2023) and Kwet (2022), who indicated that AI ethical guidelines must be localised to reflect regional realities. As institutions differ in infrastructure, accessibility, and laws protecting the of AI, this can be done to avoid creating a digital divide.

Limited Awareness and Understanding among Key Stakeholders

The findings reveal a lack of awareness and understanding of the ethical implications of AI use among key stakeholders, including academics, administrators, PSTs, and institutional decision-makers. The results report that university management does not understand the importance of AI and how it can be regulated. This limited awareness suggests that stakeholders often perceive AI primarily as a technical tool and overlook its ethical dimensions. Such a gap highlights the absence of adequate training on both the functional and ethical use of AI tools within higher education institutions which lecturers, as main users, do not attend. These findings are consistent with Abibio and Olatokun 2023 (2024), who argue that although AI tools are increasingly integrated into higher education in Lesotho, users frequently remain unaware of the associated ethical risks. This means that lecturers' and PSTs' information can be accessed and used by unauthorised people without them being aware of this risk. The lack of understanding is particularly evident among PSTs, who may generate assignment content using AI without proper attribution, and this practice raises significant concerns about their academic integrity. Moreover, the ease with which PSTs can access and circulate examination materials, including lecturer-generated questions and memoranda for examinations or tests, underscores the vulnerability of academic systems in the absence of ethical guidelines or oversight of such guidelines.

This situation suggests that lecturers and institutional administrators may be insufficiently informed about how AI can be misused, thereby failing to implement necessary safeguards, as suggested by the theory on responsible research and innovation of Owen et al. (2013). Therefore, it becomes critical to instil a culture of ethical AI use among PSTs and academic staff alike when they have never been introduced to any. Preservice teachers, in particular, must be required to declare the authorship and originality of all submitted work for the maintenance of integrity. Furthermore, any use of AI-generated content must be transparently disclosed to promote accountability and uphold academic standards for fair treatment across institutions. When all stakeholders are informed about these risks, institutional adaptation can be easier.

Ethical Risks

The study identified no mechanism monitoring AI systems for bias in grading or accessing data (information). In most cases, the AI-driven tools that PTSs use for collecting data temper with their privacy as they engage with these metrics without opt-out options, and their personal data are accessed and stolen (hacked) without their consent. Ethical risks are also mentioned by Floridi and Cowls (2019) that ethical guidelines are important because they prevent algorithmic bias and data privacy violations while upholding academic integrity. UNESCO (2021) advocated that the use of AI must promote the accountability of PTSs for any data they feed or download using AI. When introduced to the potential risks that are likely to follow, PSTs can thus use AI responsibly, as grounded by the theory adapted for the study. This is also highlighted by African Union (2020–2030) that AI policies to be developed must be socially just and context-sensitive. Benchmarking on established universities like UP, it can help Lesotho develop clear guidelines that delineate acceptable and unacceptable uses of AI tools and AI-driven code generators by all stakeholders. By developing these guidelines, Lesotho higher education can work towards achieving Goal 4 of the Sustainable Development Goals concerning access to quality education. It will also provide practical insights for higher education institutions seeking to understand existing guidelines and how such can inform the formulation of guidelines that suit individual institutions.

Discrimination for Assessment

The study found that AI usage has the risk of discrimination for assessment for PSTs. Since AI-based grading systems are designed to enhance objectivity and efficiency in assessment, lecturers use them to discriminate PSTs' performance. On the other hand, lecturers seem to be using AI-based grading systems to enhance objectivity and efficiency in their assessment. The problem is that AI based-grading systems are poorly integrated into academic environments without proper ethical oversight, and if used properly, these tools can reinforce or amplify discriminatory practices, especially when misused by lecturers or when operating them with biased algorithms. This brings us back to the potential risks that Owen et al. (2013) referred to, as mentioned earlier in the study, indicating that risks should be anticipated before developing guidelines so that they are avoided. While the intention behind using AI grading tools is to eliminate human bias, lecturers may unintentionally or deliberately use these systems in discriminatory ways towards certain groups of PSTs for any reason. Consequently, reliance on automated scores means discrimination when used without critically reviewing or adjusting outputs, especially if the AI system penalises language styles, cultural expressions, or non-standard formats. This concurs with Floridi and Cowls (2022), who indicated that automated systems do not remove bias. Rather, they simply relocate it to the algorithmic level, where it becomes harder to detect and question, and this can disadvantage PSTs whose linguistic, cultural, or cognitive styles differ from the norms of the AI system. This implies educational injustice, where certain groups may be downgraded or unfairly assessed, while some lecturers can use AI feedback mechanisms to justify grades given without transparency. This may lead to PSTs feeling discriminated against due to unheard grievances and unfair assessment practices. However, when integrated into academic environments without proper ethical oversight, these tools can reinforce or amplify discriminatory practices, especially when misused by lecturers or when operating with biased algorithms.

Suggestions for Policy Development

The study recommends that higher education institutions and the Lesotho Government should promote research on AI applications tailored to local educational needs. This can be done by formulating AI ethics committees consisting of staff, PSTs, and external experts, since the involvement of all relevant stakeholders in the development of ethical guidelines would help to build trust and accountability in AI applications. It also suggests that higher education institutions align their institutional AI policies with POPIA and the Higher Education Qualifications Sub-Framework (HEQSF), which govern AI use globally. Collaborating with these international bodies can provide valuable insights and best practices for AI regulations in higher education. It further suggests that higher education can also develop sector-wide policies in collaboration with the Council on Higher Education (CHE) (which regulates quality assurance in higher education) and the Ministry of Education and Training for the fair and equal treatment of all PSTs. Furthermore, AI tools that detect and prevent the misuse of AI can be installed and used as AI-detection software alongside traditional assessment methods. These can also be coupled with the incorporation of oral assessments and reflective tasks that will verify understanding of the content created and submitted as assignments.

As AI tools often require large amounts of data, raising concerns about privacy, strong data protection and privacy regulations must be in place to strengthen data protection laws specifically relating to AI in higher education. All institutions must ensure that they comply with international standards on data security and privacy. Another strategy that can be implemented is faculty and student training on AI literacy to introduce and help users understand the benefits and risks brought by AI. This kind of training should focus on AI-driven research methods, digital ethics, and critical evaluation of AI-generated content for regulated use. Hence, workshops and seminars should be integrated into the academic development programmes of each institution on how to ethically use AI.

Conclusion

The integration of AI into higher education offers significant opportunities for enhancing learning, research, and administrative processes. Artificial intelligence holds transformative potential for South African higher education, but ethical and policy frameworks must keep pace. It is established form this study that that the absence of mechanisms that monitor AI systems preventing bias introduce PST's and lecturers' data to unauthorised people who are likely to hack it. It also influences Lesotho institutions to remain relying on those old policies that do not specify how to use AI. Without proactive strategies, these tools can exacerbate inequalities and compromise academic integrity without proactive strategies. However, unregulated use of AI tools raises concerns about academic integrity, data privacy, and equity. For Lesotho, developing a comprehensive policy framework to regulate AI in higher education is crucial.

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