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Decolonising AI: A Pan-African collaboration

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Abstract

Amid the growing global adoption of Artificial Intelligence (AI) in higher education, concerns regarding its ethical use, cultural relevance, and epistemic consequences are becoming increasingly urgent, particularly within African contexts. This paper arises from a Pan-African academic collaboration that critically examines AI from a decolonial perspective, focusing on multilingualism, assessment, and pragmatic application in universities. The authors draw on decolonial theory and Afrocentric philosophy to promote the inclusion of African languages, epistemologies, and pedagogical values, while acknowledging how current AI systems reflect linguistic hierarchies embedded in global data infrastructures. Framed by an exploration of how cross-continental collaboration can advance contextually grounded, socially responsive, and inclusive approaches to AI in education, this paper illustrates how professional learning through the African Engineering and Technology Network (AFRETEC) facilitated critical reflection and co-authorship. Rather than viewing AI as a neutral tool, the authors argue that dominant technological paradigms often reinforce colonial hierarchies, and advocate for a reflexive, values-driven approach to AI implementation. This paper contributes to the field by foregrounding a uniquely African, multilingual, and decolonial approach to AI in higher education, offering insights into the transformative potential of South–South–North collaboration and co-created knowledge. It highlights the sociocultural embeddedness of AI and calls for innovation that is ethically grounded and locally relevant.

Keywords: African higher education, decolonisation, epistemic justice, generative AI, Pan-Africanism, socially responsive pedagogies

Introduction: Centring the Indigenous African voice

This conceptual paper examines the integration of Artificial Intelligence (AI) by a group of academics and academic developers participating in an African Engineering and Technology Network (AFRETEC) project. As members of this network, some of us collaborated on three 'think pieces' exploring AI in relation to: (i) multilingualism, (ii) assessment, and (iii) pragmatic use. This exercise aimed to explore our current thinking and practices concerning AI. The change we sought was to uncover more authentic ways of integrating AI, through an African lens, into our practices in decolonial and contextually grounded ways. Echoing Hardman (2024), we advocate for a decolonial pedagogy centred on collective meaning-making. This involves more than the provision of discipline-specific content and the testing of its application. It calls for dialogic methodologies, especially concerning AI integration. By decolonial pedagogy, we include decolonial thought, as articulated by Adams (2021, p. 190), who argue that:

> Decolonial thought is far more than a tool to problematize AI. It is an invocation to make intelligible, to critique, and to seek to undo the logics and politics of race and coloniality that continue to operate in technologies…

Although diverse in our thinking about AI, we were united by a shared desire to contextualise and decolonise AI within our teaching and research. We were interested in the broader question: How could a cross-continental collaboration challenge epistemic injustice and promote more contextually grounded, socially responsive, and inclusive approaches to AI in education? Our argument is that the African context must take precedence for Africans; while there is much to learn from other epistemologies, the indigenous African voice must be far more present in how AI is integrated in practice. This article is timely considering ongoing global debates on AI, particularly concerning its ethical use and the misplaced dominance of Eurocentric views. We explore how AI can be ethically appropriated by African scholars and students. Unfortunately, such debates are often prematurely hijacked by dominant non-African epistemologies, leaving the intended beneficiaries underserved.

Context and background

The University of the Witwatersrand (Wits) in Johannesburg, South Africa, has positioned itself at the forefront of pedagogical innovation through the work of its Centre for Learning, Teaching, and Development (CLTD), which spearheaded a transformative Peer Review of Teaching Strategy. This initiative emerged as a deliberate response to the dual imperatives of enhancing reflective pedagogy and reimagining postgraduate supervision within the evolving landscape of global higher education (HE).

To amplify its influence, Wits strategically aligned itself with the AFRETEC network, a Pan-African consortium dedicated to leveraging engineering and technological expertise for inclusive digital transformation across the continent. AFRETEC's mission, grounded in decolonial praxis and epistemic equity, provided a synergistic platform for integrating educational technologies (edtech) and systematising peer review methodologies.

Titled Advancing Peer Review and Supervision Practices Using AI and Data Analytics, the course transcended conventional professional learning paradigms by equipping participants[1], drawn from Wits, AFRETEC partner institutions, and the Wits-Edinburgh Sustainable African Futures (WESAF) doctoral programme, with evidence-based feedback mechanisms and technologically augmented supervision. The curriculum's innovation resides in its dual focus: deconstructing power asymmetries in academic evaluation through AI-mediated objectivity, while simultaneously cultivating culturally responsive feedback frameworks attuned to Africa's sociotechnical challenges.

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This initiative culminated in this collaboratively authored article that offers a counter-narrative to the Global North-dominated academic ecosystems. By situating digital transformation within a framework of epistemic justice, Wits and AFRETEC demonstrate how technology can act as both a disruptor and an enabler of equitable academic ecosystems, provided that its integration is decolonial and contextually relevant. This project exemplifies the transformative potential of South–South–North partnerships to reconfigure power dynamics in HE, positioning African institutions not only as consumers of global knowledge paradigms but as architects of contextually grounded, socially responsive pedagogies.

Theoretical framework

AI has (mostly) gained acceptance as a tool to support learning and teaching in educational institutions across the Global South. The question is no longer whether AI can assist learning, but rather how it should be guided and understood by students in alignment with the broader decolonisation agenda. In brief, decolonisation is a disruptive endeavour aimed at dismantling colonial influences in education; it involves the liberation and de-caging of the colonised mind by shifting focus away from Western perspectives as the default centre of development (Nyoni, 2019). The decolonial thought further advocates for a radical shift from the Global North's construct of 'universality' toward pluralisation of the world and what it means to live together as humanity (Mhlambi 2020) within it; not positioning one mode of thought as singularly and universally superior to all others. (Wa Thiong'o 1986, Birhane 2019, Mohamed, Png & Isaac 2020, Adams 2021)

This paper is grounded in a decolonial theoretical orientation that challenges the epistemic and ontological dominance of Eurocentric paradigms within AI and educational systems. Drawing on decoloniality and Afrocentric thought (Eybers, 2023), it interrogates how AI technologies and curricula often reinforce hegemonic structures by embedding Western-centric norms, values, and epistemologies. The paper argues that decolonial education reform is essential for restoring epistemic agency in the Global South, calling for context-responsive AI integration that aligns with indigenous knowledge systems, socio-historical realities, and pluriversal pedagogies.

The uncritical assimilation of AI in HE risks reinforcing the digital divide, raising a critical question: Who are the decision-makers that empowered machines to determine how humans ask questions, learn, think, and write? (Eubanks, 2018). Therefore, culturally relevant, equitable, and inclusive strategies are imperative in HE (Miao, Schwarz & Schwarz, 2021), along with the promotion of relational ethics to counter "algorithmic injustice and harm... [of] ...society's most vulnerable [who] are disproportionally impacted" (Birhane, 2021, p. 1). Perhaps, precisely in the spirit of decentralising Western epistemologies, what is urgently needed is not only the advocacy for knowledge systems that reflect pluriversalism, [recognising multiple, coexisting ways of knowing and being, rather than a single universal framework] (Escobar, 2018), but also an intentional drive for Indigenous and Global South knowledge to shape research methods, curriculum design, and digital innovation (Smith, 2021).

We recognise that AI is often described as a tool, and that it does not possess agency or intent. However, as Mohamed et al. (2020) remind us, AI systems are not neutral. They are shaped by the political, social and economic conditions in which they are developed and used. Our critique is not directed at AI as a technical invention in isolation. Rather, we are concerned with the broader infrastructures that shape its design and deployment – including who builds these systems, which data sets are used, and what kinds of knowledge are privileged. Echoing Adams (2021), we argue that when these systems reflect extractive or exclusionary assumptions, they risk reinforcing colonial hierarchies even as they appear innovative or helpful. Referring to AI as 'colonial', then, is not about attributing intent to the technology. It is about recognising how historical power relations are reproduced through its development and application. This view aligns with Kwet's (2019) notion of digital colonialism, which draws attention to how control over digital infrastructure and knowledge continues to rest in the Global North.

Through this lens, the study conceptualises decolonial AI praxis not as rejection but as transformation – centering African intellectual traditions, ethics, and futures in the co-creation of equitable and liberatory technological systems. African values, ontologies, and philosophies – such as Ubuntu, communalism, and restorative ethics – must be central to digital knowledge formation (Mhlambi, 2020; Menkiti, 1984). However, equitable AI systems must not only be co-created with local communities, grounded in respect for lived experiences and socio-cultural values (e.g., Smith, 2021), but perhaps also in juxtaposition, if not at a perpendicular angle of reasoning, with the initial creators of dominant knowledge formations. In this way, incorporating both an Afrocentric philosophy as well as critical literacy as a critical pedagogical approach; being part of cocreating a literacy "as part of the process of becoming conscious of one's experience as historically constructed within specific power relations (Anderson & Irvine, 1993, p.82)". This also calls on educators to act as critical curators of knowledge – not passive adopters of AI, but active agents who, through oppositional discourses, shape how, when, and why AI is integrated into educational practices in ways that reflect their pedagogical intent, local realities, and ethical commitments.

Literature review: AI debates and critiques

It was in moments of student protest and crises – vividly described by Nomvete & Mashayamombe (2019) as 'fallisms' – that decolonisation (Hardman, 2024) became centred. The #FeesMustFall protest, a decade ago, highlighted the urgent need to question and critique colonial ways of knowing, doing, and being as part of the broader decolonisation debate. The decolonial turn as process (Ndlovu-Gatsheni, 2013) marked another opportunity to delink from dominant Western ontologies and epistemologies, and to reclaim diverse African ways of knowing that reflect the continent's epistemic and cultural pluralism. At the same time, we were called to recognise the humanity of all people (Ndlovu-Gatsheni, 2020). This was a moment for pluriversal approaches – rooted in local contexts while inclusive of global perspectives – to be created and enacted (Schramm & Ndlovu-Gatsheni, 2024). However, the failure to do so still largely persists.

Critiquing Western reasoning and philosophy on which AI ethics is based, Mhlambi (2020) and Birhane (2021) concur, that ethics is not about a deviation from the 'correct' universal norm or values as the Western ethical code unilaterally promotes. Rather Mhlambi (2020) provides for an alternative ethics in the Ubuntu philosophy which is founded on relationality and personhood. Rationality and not the Euro-centric ethics, Mhlambi (2020) contends, can be used to address the major challenges in AI, such as 'surveillance capitalism' (a new world order where human behaviour has become the commodity of capitalist extraction) (Zuboff, 2018) and 'data colonialism' (the audacious and brazen rush to extract and exploit personal data and data systems from the low-tech communities in the Global South by Global North) (Mhlambi, 2020, Adams, 2021).

Despite the decolonial focus, the subsequent obsession with AI (Dimitriadou & Lanitis, 2023; Walkington, 2025) has brought with it ethical dilemmas and contestations that rightly delay the hasty integration of AI. Implicit in this are critical questions of whose knowledge is valued and how one comes to know – bringing epistemic (in)justice issues to the forefront (see Hopwood & Frick, 2023; de Sousa Santos, 2015; Young, 2006). Thus, from a pedagogical (learning and teaching) perspective, we align with Hardman (2024, p. 155) who states

There is always the chance that someone will feel real epistemic violence when work they believe is central is shown to be peripheral or is critiqued in a decolonial space. . .. There is no simple way to dismantle centuries of colonial ways of thinking and being.

In adding AI discourse and practices to the mix, we necessarily acknowledge the many espoused benefits of AI integration. These include Generative AI supporting the African philosophical approach of "learning on the go" and reflection (Suliman, Mohale, Maphoto & Sevnarayan, 2024); enabling "distant writing" or "*wrAIting*" that expands "feasibility, not just increased efficiency or effectiveness" (Floridi,

2025, p. 4); personalised learning; enhanced teaching and assessment (Ayala-Pazmiño, 2023); text-to-speech options; and AI-generated reviews (Kimmons, Veletsianos & Trust, 2025), among others.

We do not mean to reject AI usage in totality, but caution against uncritical use. We call for integration to consider when/how/why AI can complement our sense of agency and align with our [African] values. We agree with Selwyn (2022, n.p.) that being more intentional about avoiding harms and careful curriculum/course design cannot magically fix the inequities inherent in AI systems and tools.

Crucially, it is important for those working with education to not presume that these harms can somehow be fixed and made more fair by more inclusive training data-sets, or more mindful approaches to progressive software design. Instead, attention should be paid to an increasing number of arguments . . . that frame AI products as advancing forms of 'engineered inequality' . . . in already inequitable social contexts (Selwyn, 2022, p. 624).

Beetham (2025) also advocates for deeply considered approaches that extend beyond individual competence to hold educational leaders accountable. She proposes three useful categories through which educational leaders might respond to AI integration; namely, repurpose, rebuild, and refuse. Beetham (2025) argues that AI integration in HE will be driven more by tension than by consensus or commonality. This suggests that ongoing contestation, critical reflection, and questioning are integral to advancing a meaningful understanding of AI integration.

Bringing the discussion into the South African context, higher education institutions (HEIs) are at varying stages of developing formal AI policies. Chaka, Shange, Nkhobo, & Hlatshwayo (2024) conducted a review of such policies across South African HEIs, identifying only eight out of 26 institutions with formalised approaches. These were categorised along a continuum from Siyavuma (uncritical acceptance), to critical (questioning specific aspects of AI-generated content), and finally to Ubuntu (valuing people first over machines). Despite growing interest, national-level AI policy for HE is still lacking. While this is not surprising, our experience tells us that AI integration has been ongoing, even in the absence of policies., perhaps due to limited understanding of this technology by policymakers. While the 'digital divide' (unequal availability of technology resources and IT support personnel in HEIs) is a big concern in many African HEIs, of even bigger concern is the negative side of digital technology and AI in the HEIs, with links to forms of coloniality and the historical construction of race. For example, a phenomenon Quijano (2017) calls 'mercantilisation of life', which describes the way that AI and digital technologies commoditise human experience (Zuboff 2018) and substitute the human as for an assemblage of their data points which are in turn, taken as a sign for the real person. The above scenario contrasts sharply with the Afrocentric philosophy of Ubuntu and relational ethics (Mhlambi, 2020) which rely on is predominant in sub-Saharan Africa.

Curriculum reform and ethics

Emerging literature shows that while some educators are beginning to experiment with how AI or Generative Artificial Intelligence (GAI) might inform curriculum design, support multilingual writing, formative feedback, or student-led inquiry, these efforts remain fragmented and unsupported (Chaka et al., 2024; Selwyn 2022). For instance, the University of Pretoria has begun embedding critical AI literacy into select humanities programmes, while Makerere University in Uganda is exploring how AI can support indigenous knowledge systems within engineering education (Chaka et al., 2024). Institutional responses tend to prioritise academic integrity or risk management over pedagogical or ethical reflection. This reflects findings from a recent review of GAI policies in South African universities, which highlight a predominance of cautious or critical positions and very limited engagement with human-centred, value-based approaches (Chaka et al., 2024). Ethics, where integrated, is often operationalised through participatory design, localised case studies, and interdisciplinary teaching that includes philosophical, legal, and cultural perspectives (ibid). Curriculum reform, then, is not just about determining which kinds of AI tools to integrate

but also about interrogating the assumptions they carry. Initiatives at the University of Cape Town, for example, aim to equip students with the tools to critique AI systems through the lens of African epistemologies. In these spaces of possibility and tension, curriculum reform could be locally grounded, open to critique, and responsive to context, linguistic, and cultural nuances.

Decolonising AI necessitates a reconceptualisation of ethics, as advocated by Mhlambi & Tiribelli (2023), who propose an ethical framework grounded in Ubuntu principles. This entails a deliberate shift away from traditional autonomy principles in ways that can effectively challenge surveillance capitalism and data colonialism. The concept of *relational revised ethics* draws attention to contextually situated (disem)power(ment), relational autonomy, and marginalised practices[2]. Similarly, Mohamed et al. (2020) advocate for revisions to traditional notions of ethics, which they refer to as 'intercultural ethics', encompassing pluralism, pluriversal ethics, and local designs. In pedagogical contexts, these ethical revisions are enacted through reflective exercises, critical coding labs, and collaborative projects that situate students as co-designers of responsible AI.

However, Adams (2021, p. 183) critiques these new conceptions of AI ethics and instead advocates for "critical thought around the idea of ethics itself". Her argument is that traditionally, ethics has been used to justify colonialism and, as such, needs to be reconfigured in its entirety if decolonising AI is to be possible. By implication, the reconceptualisation of ethics and calls for 'AI for Good', 'Fair and Responsible AI', and 'AI for Humanity', remain a contention and threaten a shift to addressing "What does AI mean because of colonialism?" (2021, p. 178).

AI embeddedness: What remains hidden?

Decolonising AI in the literature is described as "a critical tool for reading power and control back into the history of AI and complexifying the sociology of the discipline" (Bell, 2018 as cited in Adams, 2021, p. 178). Another perspective is offered by Mohamed et al. (2020, p. 677), whose views involve sociotechnical foresight to "support future technologies that enable greater well-being, with the goal of beneficence and justice for all". As a group of African practitioners and scholars embodying decolonising ideals and social justice values, we relate to these conceptions. We want to centre the indigenous African voice in AI integration and explore the implications of the hidden curriculum for local AI integration and practices. Like Adams (2021), we believe that if we do not do this, we may exacerbate the very tensions and problems we seek to dismantle through a decolonial lens.

A notable tension is that educational practices (including peer review and postgraduate supervision) are situated within existing colonial structures and cultures, each with its own political and socio-economic contexts. Decolonising AI recognises that these practices are not value-free and do not occur in a vacuum; they are indeed part of the hidden curriculum. AI integration in these contexts is, by implication, also political and contextual. These relational aspects of AI integration, which often remain hidden, warrant constructive critique.

The way AI is integrated is as much about the formal curriculum as it is about the hidden curriculum (unspoken rules, taken-for-granted assumptions, power relations, and embedded cultures and ideologies that are often tacitly palpable). By hidden curriculum, we refer to what Lange (2019) argues is embedded in the curriculum (distinct from the organisation of the curriculum such as level descriptors, sections/units, etc.). She distinguishes between the academic curriculum and the institutional curriculum. It is in the latter where the hidden curriculum resides, and which remains largely unexplored to date. The hidden curriculum invites us to consider the entire human being holistically and not merely as a cognitive entity (Boughey & McKenna, 2021). AI integration thus compels us to consciously grapple with what is hidden (power relations, values, and norms) and how we socialise students and ourselves within dominant discourses and practices, since we have agency in how

[2] See Mhlambi & Tiribelli, 2023 for a discussion on relational autonomy.

curricula and technological tools are embedded in our spaces. Subsequently, these concerns also guided the co-authors, who divided into three groups to explore thematic intersections with AI.

Insights on the three think pieces

As co-authors, we divided into three groups based on a shared interest in exploring different thematic intersections with AI: (i) AI and multilingualism, (ii) AI and assessment, and (iii) AI and its pragmatic use and application. These thematic strands enabled us to engage critically and collaboratively with our thinking on how AI is conceptualised and deployed in education, while highlighting the specific contextual realities and epistemic traditions of African students, educators, and institutions. What follows are reflections[3] on the think pieces by two co-authors of this paper (Author 1 and Author 7).

Educational reform

In our context, multilingualism is a central concern when considering AI in education. Many AI tools, particularly those designed for writing assistance, translation, or summarisation – are constructed around monolingual norms, primarily in English or standardised dialects. This creates a tension between AI's potential to support students' multilingual realities and the fact that current AI systems often marginalise these languages. Our reflection highlights the linguistic discrimination encountered by African students in multilingual settings, where AI tools penalise the use of non-standardised language forms. Tools such as grammar checkers inadvertently reinforce colonial ideologies by policing what is deemed 'proper' language, echoing broader structures of symbolic violence. Similarly, co-authors in think piece one reflected, *"When a student's academic success hinges on their ability to 'talk to' AI in English ... the university isn't just failing its linguistically diverse learners, it's actively silencing them."* In this way, English fluency and 'prompt literacy' function as forms of cultural capital, granting access to more coherent AI outputs, while students who operate in African languages or hybridised linguistic forms receive vague, inaccurate responses. This reproduces exclusionary academic hierarchies, as noted in the argument in think piece one, *"Students without English proficiency or prompt literacy receive vague, inaccurate AI output, further deepening disadvantage."*

Moreover, many AI systems embed Western epistemic norms by default, positioning dominant linguistic and cultural frameworks as neutral or universal. This has the effect of erasing the epistemic value of African languages and knowledge systems, replacing them with Western-centric assumptions. As captured in the think piece *"AI... must avoid reinforcing Western centric norms that marginalise diverse epistemologies and authentic voice."* Without critical design and contextual awareness, AI not only fails to engage multilingual realities, but also *"substitutes dominant Western frameworks for local context and critical engagement".* The danger is that AI may erase the epistemic value of African languages, thereby further marginalising African knowledge systems and ways of knowing.

The introduction of AI into educational assessment in Africa presents both promise and peril. While AI offers the potential to enhance efficiency, objectivity, and scalability, it also risks reinforcing colonial hierarchies through its algorithmic design. Tools developed for grading, plagiarism detection, and feedback frequently rely on linguistic and epistemological assumptions that are misaligned with African educational contexts. Co-authors in think piece two stated *"AI tools are typically designed with Western pedagogical models, which may not align with local curricula or cultural modes of expression. This misalignment can reduce the validity of AI-generated assessments and feedback in African contexts."* As such, these systems may re-inscribe colonial epistemes by failing to recognise or support African languages, knowledge systems, or modes of student expression.

[3] **Disclosure**: Although the original think pieces are not included here, all contributors to them have been acknowledged as co-authors of this paper and excerpts from them have been added where necessary. The first eight co-authors each wrote specific sections, while the remaining authors engaged in various ways, including collaborative authorship, critical reading, coherence checking, and editing.

We caution that AI-based assessment systems often reproduce cultural biases by privileging particular academic conventions and linguistic structures that are not universally applicable. This is especially problematic in African HE, where alternative forms of expression and culturally grounded narratives may be undervalued or penalised. Furthermore, co-authors in think piece three stated *"a reliance on imported AI solutions risks creating technological dependency. There is a need for locally developed AI tools that reflect regional educational goals and linguistic diversity."* Without locally led design and adaptation, the integration of AI risks perpetuating a new form of digital colonialism, one in which African education systems are shaped by external standards rather than their own pedagogical philosophies.

Moreover, these tools tend to promote individualistic modes of assessment, overlooking the communal and dialogic pedagogies that are central to African educational philosophies. A decolonial approach to AI in assessment would prioritise process over product, and collective learning over individualised metrics. AI could play a supportive role in students' growth and development by offering constructive, culturally relevant feedback. However, this should be accompanied by ethical considerations regarding data practices. Similarly, as stated in think piece two *"the use of AI platforms hosted outside the region raises concerns about data sovereignty... without robust data protection policies, student information may be exploited for commercial or non-educational purposes,"*. Hence, it is crucial to recognise how extractive models of data usage mirror historical exploitations and threaten students' autonomy.

We reaffirm our position that the role of AI in assessment should not be to impose external standards, but rather to augment the work of human educators, The adoption of AI tools often presumes access to reliable internet connectivity, high-quality digital devices, and proficiency in English – conditions that are not universally met across the African continent. In think piece three, co-authors stated *"The implementation of AI at universities without careful consideration could potentially widen the inequality gaps... and undo the work towards a decolonised curriculum."* This excerpt reinforces the concern that without critically addressing infrastructural disparities, linguistic exclusion, and epistemic biases, AI may reverse gains made in curriculum transformation and epistemic justice.

Our aim is to draw attention to the risks associated with the uncritical use of AI, which may exacerbate existing educational inequalities and further marginalise already disadvantaged students. Rather than focusing solely on the efficiency and scalability of AI, it is essential to ensure that AI tools are contextually appropriate and ethically aligned with African values. According to think piece three *"AI must be used in ways that support students in developing critical, reflective and discipline-appropriate engagement with knowledge… AI is not just a tool, but something that must be introduced with care."* This underscores that AI is not neutral; its design and deployment must be embedded within culturally responsive, critical pedagogical frameworks that foreground local knowledges and student identities.

The pragmatic application of AI in African institutions should be guided by principles of equity, accessibility, and local relevance. AI cannot not be regarded as a neutral technological solution, but rather as a tool that should be adapted to meet the specific needs of African students and communities. Co-authors in think piece three were of the view that *"The idea of AI as a 'tutor' or 'learning assistant' is compelling… But what kinds of thinking are we enabling, and what might be left out?"* This insight challenges us to move beyond framing AI as merely a functional tool toward envisioning it as a culturally aware educational partner. Inspired by Vygotsky's (1978) Zone of Proximal Development, this view positions AI as a "more knowledgeable other" that scaffolds learning in ways that are epistemically just, rather than epistemically erasing.

Technological design choices

A central concern that emerges is the need to critically engage with the infrastructures, assumptions, and pedagogical framings that underpin AI's integration into African HE. While much attention has been given to epistemic justice, linguistic inclusion, and assessment fairness, it is

equally necessary to foreground the technological design choices and computational logics that enable or constrain such possibilities. AI systems, whether employed for multilingual support, formative feedback, or personalised learning, are not neutral tools; they are epistemic agents shaped by data inputs, modelling practices, and cultural assumptions embedded within their architectures. As co-authors in think piece three caution, "*AI must be used in ways to support students in developing critical, reflective, and discipline-appropriate engagement with knowledge…AI is not just a tool, but something must be introduced with care*."

In our context, the adoption of digital technologies in higher education often mirrors what Trigueros, Lozano & Sandoval (2014) describe as the 'replacement, amplification and transformation' (RAT) model. Technologies are frequently used to replicate existing tasks (e.g., replacing chalkboards with projectors) or increase efficiency without changing pedagogical structures (e.g., using calculators instead of manual computation). While AI is often introduced as a transformative tool, our reflections suggest that its implementation more commonly falls within the replacement or amplification categories. Rather than disrupting inherited models of learning and teaching, it risks entrenching them, especially when embedded without contextual responsiveness. This concern is echoed in think piece two where the co-authors posit that, "*AI tools are typically designed with Western pedagogical models, which may not align with local curricula or cultural modes of expression. This misalignment can reduce the validity of AI-generated assessments and feedback in African contexts.*"

From a computational standpoint, the dominance of Global North datasets and the prioritisation of benchmark-driven development led to the systematic reproduction of linguistic and cultural biases. This is particularly evident in how AI systems interpret prompts, generate academic language, and assess language proficiency. Current efforts to make AI 'accessible' often reduce linguistic inclusion to superficial interface features, without interrogating the deeper assumptions about what constitutes valid knowledge or acceptable academic expression.

A more transformative approach would involve rethinking the foundations of these systems by incorporating African epistemologies, narrative forms, multilingual practices, and oral traditions into the training datasets and annotation frameworks that shape generative and agentic AI tools. However, at present, such integration remains more aspirational than actual. As co-authors in think piece three caution, "*a reliance on imported AI solutions risks creating technological dependency*," reinforcing epistemic hierarchies rather than disrupting them. While African scholars have long called for knowledge systems rooted in local intellectual traditions (Madiba, 2014; Luckett, 2012), their influence on the design of AI technologies remains limited. Even efforts to localise AI can fall back on Eurocentric validation norms if not grounded in African-led design processes. This raises an urgent concern: whose epistemologies are being coded into our systems, and who decides what counts as valid knowledge? Without deliberate reconfiguration led by African scholars and grounded in the lived contexts of students and educators, AI systems risk reinforcing rather than redressing historical marginalisation.

From the perspective of assessment, our reflections highlight the need for algorithmic objectivity and the promise of efficiency. They also emphasise how these logics may overshadow contextual and relational forms of evaluation. Therefore, a deeper consideration of student agency, identity, and growth is warranted. Emerging work in affective computing and character-aware AI demonstrates that feedback systems can be designed to recognise the emotional and motivational dimensions of learning – elements that are crucial in diverse African classrooms yet often excluded from AI assessment tools.

Finally, the pragmatics of AI use in under-resourced settings necessitates a shift from tool-centric adoption to ethically framed, co-designed ecosystems. Drawing on frameworks such as critical digital pedagogy and participatory design, AI integration should prioritise not only context alignment but also user agency and pedagogical responsiveness (Morris & Stommel, 2018). For example, models of AI-human collaboration can be expanded to support dialogic learning, emotional resilience, and culturally grounded

meaning-making, rather than mere task completion.

In sum, our reflections point to the need for a fundamental reimagining of AI; from a mere technical assistant to a pedagogical co-agent. Achieving this shift requires more than interdisciplinary collaboration as it calls for a deliberate reorientation of the epistemic foundations on which AI is developed. This includes placing African values, languages, and student identities at the heart of design.

Discussion

This paper emerges from critical reflections across a range of disciplines, representing a shared consensus not only on how AI tools should function, but also on how the knowledge generated by and through AI can be meaningfully appropriated by African scholars and students. Central to these reflections are concerns surrounding AI's integration into African HE, particularly issues of linguistic inclusion and assessment fairness.

Our analysis draws on the premise that AI is not a neutral tool, but a sociotechnical system shaped by political, epistemic, and historical forces (Mohamed et al., 2020; Adams, 2021). This framing enabled us to surface how AI integration in African higher education is often influenced by inherited digital infrastructures and global design norms that do not reflect local needs or values. Rather than centring critique on the technology itself, we examined the broader ecosystems, including institutional policies, data sources, and assumed pedagogies that shape how AI is adopted. This enabled us to critically engage with what is often hidden or naturalised, such as assumptions about 'good writing', assessment practices, or linguistic legitimacy. Understanding AI as a product of specific design logics also helped us question its role in reinforcing colonial patterns, even unintentionally (Birhane, 2021). Referring to AI as 'colonial' is not about attributing intent to the tool itself but about interrogating how historical relations of domination are encoded into its development and use, often through systems that privilege particular ways of knowing while excluding or marginalising others.

We propose that African HEIs critically interrogate the technological choices embedded within their assessment protocols, to counteract the often inflexible, prefabricated 'use-as-is' AI designs prevalent in many academic settings. This paper enables us to voice a collective critique of the underlying assumptions that shape AI design, and to challenge African institutions to increasingly train AI systems using locally curated data. While we acknowledge that technological infrastructure remains a challenge for many African institutions, the AFRETEC philosophy, similar to the philosophy of regional network partners like UbuntuNet Alliance (Bello & Mtsweni, 2022), grounded in collaboration and the sharing of resources and expertise among African institutions and academics offers a viable framework to address this concern.

The second issue relates to the pragmatic use of AI in under-resourced settings. While our intention is not to propagate a deficit narrative, we acknowledge the genuine needs present within our communities. This perspective is inherently African and is widely valued across the continent. As a collective, we emphasise the importance of increased awareness and the provision of continuous professional learning opportunities for all stakeholders in education, particularly students, regarding the responsible use of AI. Frameworks such as critical digital pedagogy and participatory design could be employed to support contextually aligned course design, peer review, and postgraduate supervision. Such approaches can empower students to engage critically and responsibly with technology, both within HE and in their broader communities.

These reflections underscore that, within the context of educational reform in Africa, AI could be adapted to local African realities by blending valuable elements from Global North paradigms with African epistemologies. Scholars such as Takyi-Amoako (2019) and Jandrić et al. (2021) emphasise the importance of contextualising educational technologies to avoid epistemic dominance and to ensure that AI supports indigenous knowledge systems and local pedagogical practices. This necessitates a hybrid approach and one that embraces innovation while also valuing cultural and contextual relevance. Such an approach embodies a posture that is open

to deliberation, guided by wisdom regarding what should be adopted and how we ought to respond, driving transformation through our own indigenous strengths (Maringe & Ojo, 2017). This hybrid approach may call for an epistemological synthesis, enabling the development of curricula and knowledge formation that enact a praxis drawing on both Global North and indigenous wisdoms (e.g., van Gelderen & Guthadjaka, 2017).

Furthermore, the reflections highlight the importance of intentional awareness that AI is not a neutral tool. As a tool of power, it can reproduce historically dominant patterns of power and political, ecological, and epistemic injustices (Mohamed et al., 2020; Mollema, 2024). One form of epistemic injustice may be the concept of "generative algorithmic epistemic injustice . . . [which can] . . . produce or amplify misinformation, perpetuate representational harm, and create epistemic inequities, particularly in multilingual contexts" (Kay, 2024, p. 684). These epistemic hierarchies and forms of symbolic violence therefore require a holistic and communal approach that promotes diverse epistemologies and bridges digital divides (Schoelen, Sebihi, Azab-El-Sherei & Sano, 2023).

What is needed is ethically underpinned, co-designed AI ecosystems that include marginalised and local communities in the design process to ensure equitable and trustworthy AI systems (Birhane et al., 2022). Reading, thinking, and writing are deeply social human activities for learning, teaching, and research. Instead of AI being central to these practices, AI systems should support human dialogic and emotional engagement, which could in turn cultivate trust, empathy, care, and responsible citizenship (Lu, Zhang & Chen, 2024; Kolomaznik, Smith & Lee, 2024).

AI systems must be reimagined not only as tools for the speakers who designed them to communicate with the world, but also as co-agents for educators and developers. These systems should be more inclusive, equitable, and supportive of diverse learners by incorporating African values, identities, epistemologies, and praxis (e.g., Mohamed et al., 2020). The higher education department could develop an AI policy that is inclusive but also ensures that the marginalised groups are protected from the misuse of AI through unethical practices such as algorithmic oppression, exploitation and dispossession. (Mohamed et al., 2020)

Conclusion

This paper has highlighted the urgency of engaging with AI in African HE not as a neutral technological advancement, but as a socio-political and epistemic force that requires critical examination. We questioned how a cross-continental collaboration could challenge epistemic injustice and promote more contextually grounded, socially responsive, and inclusive approaches to AI in education. We did this through a decolonial lens, to advocate for approaches to AI integration that recentre African languages, epistemologies, (hidden) norms, values, and power dynamics. Our cross-continental collaborative reflections, professional development experiences, and multilingual engagements within the AFRETEC network illustrate that more inclusive and socially responsive approaches to AI are not only necessary but entirely possible. As African universities navigate the complexities of AI integration, it is essential that we honour our histories, languages, and ways of knowing. To actively shape the future of AI, we must first (re)claim our collective agency to define its purpose and ensure it aligns with the continent's diverse contexts.

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Disclosures

Conflict of interest

The authors declare no conflict of interests.

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