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FORUM

Perspectives from South Africa on GenAI in Higher Education: A Postdigital Dialogue with the Global Context

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Abstract

Drawn from an interdisciplinary gathering of 51 colleagues at the University of the Witwatersrand (Wits) in Johannesburg in March 2025, this collective article shares multiple perspectives from South Africa on our interactions with Generative AI (GenAI) across higher education (HE). Contributors have re-created our dialogue here, in the spirit of *Ubuntu* and via a *postdigital* lens, bringing together vital local knowledge and literature to demonstrate why context always matters deeply. Over decades now, HE policy language has inferred that we all experience digital technologies in the same way. With GenAI, this technocratic determinism is accompanied also, by a depressing dystopian fatalism. Rather than confine our diverse positionalities within either of these viewpoints, we favoured a relational approach of *reciprocal listening* and *pedagogical responsiveness* to explore the complex interplay between GenAI, learning design, assessment, and social justice. Amid the pressure to integrate GenAI, a deliberate pause is needed, to notice and respond to, the flaws it exposes in our traditional systems. It is therefore timely to also review the social contract that underpins equitable and ethical opportunities in HE. Under four themes, authors provide recommendations towards a new critical, relational GenAI governance, based on diverse lived experiences in this messy postdigital space. From this particular context in South Africa, we now warmly invite continued discussion across the wider global community.

Keywords Ubuntu · Postdigital · Dialogue · Generative artificial intelligence · South Africa · Social justice · Learning · Teaching · Research · Positionality · Context · Listening · Responsiveness · Ethics · Human–data interactions · Capacity building · Collaborative writing · Activism · Disruption

Introduction

The challenge to avoid generalisations about digital technologies in learning is ongoing, amid increased complexity, as Generative AI (GenAI) has infiltrated our shared global futures (Osman and Walton 2022). Situated learning has always been important, emphasised as a shifting from the individual as a learner to learning as participation in the social world (Lave and Wenger 1991: 43). The social world has also always been a sociotechnical world, where our co-evolving with our technologies is part and parcel of what it is to be human (McLuhan and Gordon 2003: 289). However, education now stands at a pivotal juncture where digital and non-digital realities are no longer separate from 'the entangled learner' who is increasingly co-constructed by social identity, algorithmic systems, and data-driven knowledge ecologies (Code 2025). This demands a pause for critical rethinking, of how the HE community approaches agency, access, and equity (Hayes 2023; Hayes et al. 2024).

This is also at a time when the rapid rise of GenAI technologies has created pressure for rapid productivity, leading to feelings of disconnection and overwhelm, but where there is a case to respond by embracing 'slowness' instead, as an act of resistance to the fast-paced, neoliberal demands of academia and allowing space for reflection and care (Raffaghelli et al. 2025). Just as we might use our human agency to press the 'pause' button on a video, there is a pressing need to halt the frenzied GenAI hype to ask some fundamental questions related to knowledge, assessment, social justice, and opportunity in the age of GenAI, and what critical pedagogic responses universities might make.

Our interdisciplinary in-person gathering at Wits University in Johannesburg in March 2025 is one such example of pushing the pause button, allowing space for a slow, situated response, bringing together 'care, reflexivity and critical dialogic pedagogies' (Dison et al. 2024: 246). It is illustrative too of the value of 'thinking-back-and-forth' between a phenomenon being experienced and reasoning about it (Spaan et al. 2024; Earle 2024: 3). This helps to acknowledge complex layers of injustice produced in the Global North that frequently bypass what is suited to an African setting (Milaras and McKay 2019). Therefore, our postdigital dialogue (Jandrić et al. 2019), developed collaboratively between Bath Spa University (BSU) in the UK and the University of the Witwatersrand (Wits) in South Africa, enabled reciprocal listening, pedagogical responsiveness, and a countering of 'contextlessness' (Williamson et al. 2024) in our ongoing discourse about digital technologies and transformation across our global educational institutions.

Pedagogic Responsiveness in The Spirit of *Ubuntu* and via A *Postdigital* Lens

Reciprocal listening in these complex, postdigital times involves different forms of 'responsiveness' towards the positionalities (Hayes 2021) of others and their local knowledge as they encounter GenAI. Just as different understandings might be brought by any of us to the idea of 'postdigital', authors have developed the concept of 'pedagogic responsiveness' to apply in complex, varied cultural contexts (Slonimsky and Shalem 2006). Walton and Osman expand this term more broadly though, than culturally responsive teaching alone, arguing that:

> It suggests a disposition or orientation to pedagogy that is sensitive, open and empathetic, not only to individual students or groups of students, but to wider factors in that community and context. Responsiveness is active. It is more than awareness of students' needs, or demands of the content, or influence of the environment, but demands professional judgement leading to action. (Walton and Osman 2022:7)

Discussing various enablers for this disposition, including 'collaboration and relational agency, epistemic engagement, contextual sensitivity, technology, institutional capacity, and Ubuntu', they suggest these factors create the conditions for pedagogic responsiveness, but that they are all 'mutually interdependent and dynamically imbricated' (Walton and Osman 2022: 11). The role of Ubuntu, understood as human interconnectedness and dignity (Waghid et al. 2002), contributes to pedagogical responsiveness via three aspects of human action: firstly, spanning local and indigenous concerns and embracing intra-human relations; secondly, through deliberative and autonomous human action, by listening and talking back; and thirdly, through a global orientation that affirms respect and compassion beyond the local community to embrace all humanity, and challenge oppression and exclusion wherever it manifests. Therefore, pedagogical responsiveness is enabled by this expansive and inclusive life-view that centres on relationality and moral responsibility (Osman and Walton 2022: 13).

Recognising Our Interdependency with GenAI Beyond Regulatory Compliance

Our relational partnerships (Gergen 2009) with GenAI in a complex, postdigital society can only become more interdependent as we look ahead into the future. This raises numerous ethical considerations, even to the point of arguments concerning the potential for reciprocal listening by AI systems themselves, with developing levels of consciousness (Butlin and Lappas 2025). As students and staff increasingly engage conversational AI systems based on large language models (LLMs) in complex, existential, and philosophical topics, such subjects can induce a compelling feeling of connection with a fellow conscious being (Shanahan and Singler 2024: 25). As such, there is a pressing need for universities to anticipate potential societal impact, in dialogue with their external communities, now faced with this dynamic and uncertain future.

Adopting a spirit of Ubuntu, where human interconnectedness and dignity are foregrounded in our responses, leaves less room for contextless language. A popular 'rhetoric where the non-human offerings of the digital era are simply said to be at the disposal of humans to deploy to augment what we do, without examining the relational or contextual aspects' (Hayes 2025: 109) cannot be sustained. A related question for us all, is 'given that we find ourselves teaching in the age of AI, whose rationalities do we wish to train these automated educational systems on?' (Hayes 2025: 122).

Furthermore, what new forms of education will help us to differentiate between sources, learn where to trust and what to share? Indeed, what new rich epistemologies will support the 'unique sets of opportunities and challenges that confront our biotechnological hybrid minds'? (Clark 2025: 3; Peters et al. 2022). Remaining reactive to assessment matters and GenAI, rather than pedagogically responsive, is a stance that cannot be sustained by universities who claim to address matters of social justice and opportunity. Thus, important decisions lay ahead for institutions concerning new forms of governance and choices of educative, or regulatory, frameworks. As Janine Arantes discusses:

> This means acknowledging that effective AI governance in higher education cannot rely solely on regulatory enforcement or technical fixes. It must also create the conditions for dialogue, participation, and learning. The task ahead is not simply to regulate AI in higher education, but to govern differently. (Arantes 2025)

Institutional governance and regulations need to be mindful of a 'complex interplay between assessment purpose, conceptions of quality, and the impacts of these on achieving social justice in higher education' (Padayachee and Matimolane 2025: 112). Opportunities to move beyond surface level and technically managed compliance, to an AI governance that is pedagogical, cultural and relational, could also enable more dynamic, inclusive policies that draw on lived experiences (Arantes 2025). We now share a little background to our event in March 2025 and our experiences of 'listening and talking back' on such questions, from the specificity of a South African university where our postdigital dialogue on GenAI took place. We later warmly invite responses to this debate in the wider global context.

Postdigital Dialogue on GenAI in Teaching, Learning, and Research

A series of online meetings during 2024 between colleagues at Wits and Bath Spa University fuelled a growing interest in holding a collaborative, in-person, cross-faculty, inter-institutional, postdigital dialogue (Jandrić et al. 2019) on our experiences of GenAI in teaching, learning, and research and implications for future practice. The aim was to bring together colleagues from across Wits University and two visiting staff, Sarah Hayes and Sarah Earle from BSU, to participate in an open workshop discussion, surfacing opportunities and obstacles for the use of GenAI in different disciplines and contexts and to pave the way for potential comparative research.

Emerging Themes

In the days following the workshop, several of us gathered in a room at Wits University to draw out key themes that emerged from our discussions. Table 1 presents a summary of the global questions and issues that arose, and the related considerations from a social justice lens from a South African university perspective.

Participant contributions, presented under the four global issues themes, provide a deeper contextual and collective reflection, thus responding to the call for slowness, care, and pedagogical responsiveness, in the spirit of postdigital positionality and Ubuntu.

What Is AI for? How To Approach AI and Its Societal Implications?

GenAI for Teaching, Learning, and Research Through the Postdigital Lens Collaboration (Shalini Dukhan)

GenAI has the potential for substantial benefit to pedagogic practices and the learning environments within higher education (HE), but when considering the Global South, some nuanced considerations are crucial. The reality for countries like South Africa is that there are people who live in well-resourced contexts resembling first world experiences, juxtaposed with communities that exist in abject poverty. This has implications for the school teaching and learning environment within these different communities (Leibowitz 2015). For instance, some learners have access to resources such as computer laboratories and others do not have these opportunities to become familiar with the digital context.

Table 1 Key themes that emerged

Global questions/issues	Social justice lens from South African university perspective
1) What is AI for? What is GenAI? How to approach it? Sustainability, environmental, societal implications	Place of the human? Postdigital and Ubuntu An epistemic break or intensification? What preserving/losing? Purpose of the university in this context Making workers or critical thinkers? Avoid false binaries, e.g., technocratic determinism or dystopian fatalism
2) Ethics Potential bias, transparency, integrity	Access, perpetuate injustices, e.g., paid/unpaid versions, data security, bias, gender, race New asymmetries, diversity of voices Who is developing AI tools? Power, knowledge economy, whose knowledge is included/excluded? Language–value multilingual, positionalities
3) Teaching and research Curriculum, pedagogy, and assessment	How use AI? What/when/what for? Support/hindrance, tool/crutch? Time saving? Product/process? Ok to make mistakes, messy/slow working, what policies are needed? Limits? How spot errors/hallucination? Pedagogical responsiveness. Contextualisation
4) Capacity building for students, staff, and institutions	Staff/student skills/institutional governance Digital divide, graduate attributes, flexible skills Reflexivity, critical thinking, space for creativity Interdisciplinary, reciprocal listening, not silos, unlearn, and relearn

Therefore, a striking concern when learners from these diverse backgrounds move into HE institutions is the stark contrast that they have with their digital experiences. The question then foremost is, are we ‘widening the gap’ that exists within the HE space if we naively see this environment as a platform of equal opportunity? Are we then perpetuating the realities of the societal context prevalent in these countries while democracy attempts to use education as a means to address historic imbalances? Are there ways to circumvent further exacerbation of inequalities within the HE teaching and learning space by using rigorous research as a way forward?

There is no argument in my mind that students need to become familiar with GenAI, especially for the advantages related to enabling global competitiveness. GenAI has already earned a space within academia, but the lines for how GenAI is used within education remain blurry. On the one hand, GenAI can be used to personalise learning, for instance in contexts where the medium of instruction is not the mother tongue of students. Yet, on the other hand, there is also serious concern that if students are not taught to intentionally use GenAI for their learning and rather use it with little academic integrity, then opportunities for the development of critical cognitive processes can be considerably limited (Tarisayi 2024).

The question then is, how do we create opportunities within the HE space to instil a good work ethic among our students and equip them, in equitable ways, with the necessary skills to enhance their learning productivity (Chaka et al. 2024)? This would also mean a change in mindset of learners to value their learning rather than seek an alternative way to produce work for their assessments. Based on this, I would like to bring into this conversation the need for considerable thought about the design of teaching approaches and practices when integrating GenAI into HE, and an investigation of GenAI in curriculum design within the Global South.

Rethinking Assessment for the Postdigital University—GenAI as A Disruptive Lever for Change (Kershree Padayachee and Laura Dison)

Disruptions in HE are commonplace (Dison et al. 2024). In the South African context, these may take the form of student protests, infrastructure constraints like inconsistent power supply, global incidents like the Covid-19 pandemic, and the emergence of GenAI. These disruptions have serious consequences for teaching and learning, which, in our context, may be further exacerbated for some students and staff, due to lingering systemic societal inequities.

While the nature of the disruptions may change, the teaching and learning challenges that surface are long standing. One area that consistently draws a lot of attention is assessment. The primary concern often centres on academic integrity and ensuring that assessment remains valid and reliable. However, depending on the anticipated duration of the disruption, deeper questions around responsiveness, equity, adaptability, and reframing may emerge. For many staff, prolonged disruptions like the Covid-19 pandemic, and the challenges of GenAI, shift the emphasis of assessment mitigation strategies from short-term maintenance of assessment integrity to longer-term rethinking of assessment purposes, principles, and practices.

In our experience (Dison and Padayachee 2022), this almost paradigmatic shift provides opportunities for assessments that are more aligned to authentic representations of understanding, anchored in the principles of authentic assessment such as realism, cognitive complexity (Villaroel et al. 2018), evaluative judgement (Boud 2021), and critical self-reflection (Rogers 2001). The emphasis is on students explaining their thinking processes and how they have engaged with concepts and learning material, rather than simply regurgitating content even at an advanced level—something that GenAI tools like ChatGPT can easily do.

Given that we cannot rely on GenAI detectors to accurately determine whether a text was generated by a human or by an AI, the emphasis must shift to designing assessments that promote learning and that demand higher-order thinking—assessments that ask students to analyse, reflect, apply, and create in ways that go beyond surface-level reproduction. For example, students can be assessed with an essay that introduces personalisation or that requires them to write for an audience that amplifies their academic voice, informed by critical AI literacies and scholarship. The use of reflective writing develops students' meta-cognitive skills and expects them to integrate theory with experience or practice. While it is easier to integrate reflective writing in disciplines that are traditionally more writing intensive, it is an approach that is also fast gaining traction in STEM and related disciplines. This is due to the affordance of more personal and active engagement, which inevitably leads to deeper conceptual understanding.

Reframing assessments is not without its challenges. How do we design pedagogically sound assessments that maintain the rigour of disciplinary content? How can we carve out time for creating learning-focused, innovative assessment tasks within a culture that often prioritises summative assessment? Addressing these questions is key to promoting meaningful learning in the age of GenAI and highlights the need to foreground fundamental assessment design considerations. These involve strategies that provide students with a framework for activity, with a clear understanding of what they need to know, and need to cater to all students to foster the critical and creative application of knowledge.

These more open and participatory approaches to assessment, informed by guides that include rather than prohibit GenAI tools such as the Artificial Intelligence Assessment Scale (Perkins et al. 2024), may also engender in students a greater sense of personal accountability and agency to self-direct their learning. In the postdigital university, we would argue that this is perhaps one of the most important learning outcomes to be achieved.

Epistemic Injustice as GenAI Exposes the Flaws of Traditional Assessment (Milton Milaras)

The sea-change upon 'assessment as usual', as instigated by the explosive adoption of GenAI, is obvious (Weng et al. 2024). Yet within South African university assessments, these problems are not necessarily new. They include for example, the deleterious impact of massification on the quality of assessment offered, students' predilection to plagiarise in more complex assessments, and epistemic justice not being served (Chrysler-Fox 2017; Mahabeer and Pirtheepal 2019; Msiza et al. 2020). The shift to online learning during the Covid-19 pandemic, followed closely by the availability and proficiency of GenAI, have sharply brought to the fore these existing inadequacies.

In the past, concerns, discussions, and the tackling of assessments' deficiencies (as indicative of deep learning) were usually consigned to educational literature. Often, experts lecturing in their discipline were able to overlook such academic discourse (van Dijk et al. 2023), and surface approaches to maintain the 'quality' or 'quantity' of assessment outputs were implemented. In the first instance, for example, 'copy and paste' plagiarism could be reliably detected, and students' lack of adherence to the prescripts of assessment resulted in failure. In the second instance, pass-rates could be maintained by focusing on reproducing content (Machingambi et al. 2012). This fosters a culture of teaching and learning dictated by the requirements of examinations. Such a culture can result in a tick-box approach (from both academics setting the assessment and students 'swotting' for it), which seeks to generate the most correct assessment result (Troskie-de Bruin and Otto 2004). In other words, this focus on 'correct' assessment outcomes could often overshadow the meaningful realisation of learning.

In South Africa, such an approach to assessment misses the imperative of transformative (decolonial) teaching, viz., to enact epistemic justice through fostering deep learning and critical thinking (Ukpokodu 2016; Gwaravanda and Ndofirepi 2021). Since circa 2024, GenAI now affords students a means to circumvent the expected rigours of assessment, and simply produce the end product of an assessment (e.g., essay argument, parcel of code, or statement of disciplinary facts) (Yusuf et al. 2024). While students are culpable for knowingly 'cheating', they are now simply better equipped by GenAI to provide what the traditional assessment system has prioritised: correct answers. With GenAI, students are now gaming the system, better than their rote learning or plagiarism ever could.

That the system can be thus gamed is an indictment of traditional assessment's valuing of correct answers *über alles*, in the place of advancing meaningful learning. Much as calculators did away with the need for manual arithmetic, GenAI has undermined the reproduction of content as a measure of learning. To extend the metaphor however, understanding the first principles of arithmetic remains central to learning mathematical thinking. Similarly, understanding the (often) abstract theoretical principles upon which disciplines rest has rarely been adequately achieved by 'passing' a content-focused assessment (Segers et al. 2003). Thus, GenAI 'attacks' and exacerbates the existing structural issues in how we have, for too long, associated successful learning with replicative assessments.

Unfortunately, students remain losers, as neither tick-box assessments nor GenAI answers ensure deep learning. In the South African context, this is also an epistemic injustice. The challenge to universities is thus not, 'how to detect or prevent AI'. Rather, across disciplines, the challenge is how to structurally integrate decades of educational literature on approaches to deep learning and meaningful assessment, in an interdisciplinary manner (Ludwig and Boogaard 2021). This continues to demand much from South African universities, such as significant structural changes to assessment policy, emphasising professional academic development, and increasing teaching resources to improve the staff to student ratios (Chetty 2015; Leibowitz 2016; West and Meier 2020). If ignored, universities' authority in producing 'educated' students may be usurped by GenAI, making their degrees dispensable.

In the light of GenAI's capabilities, the long-time calls to nurture student's critical thinking (Fricker 2007; Grosfoguel 2015) can no longer be overlooked. It is the capacity for critical thinking, which still sets humans' cognitive capacity for problem solving apart from large language models (LLMs). Considering the modern-day poly-crises facing humanity, such critical thinking is a necessity in realising restorative social and environmental justice. The university thus has an incredibly important role to play in producing future thought-leaders and problem-solvers; if that is, it can transcend the fundamental flaws of traditional assessment, which GenAI has so masterfully exposed.

Ethics, Potential Bias, Transparency, and Integrity

Research Work Noticeably Changed with the Advent of GenAI (Alexandra Smit-Stachowski)

I am a media professional and freelance editor at the School of Construction Economics and Management, University of the Witwatersrand, and in my spare time, I edit bachelor, doctoral, and postdoctoral student dissertations. About a year ago, I noticed how the syntax and style of student dissertations evolved almost overnight, due to the use of GenAI, primarily ChatGPT. When I first started this side hustle in 2015, I saw aspiring graduates valiantly trying to follow their tertiary institution's style guide to meet each university's editorial and style requirements, while also exploring their research topic.

There had been much chatter about OpenAI's GPT, but in South Africa, it was a while before I saw it in the student work I edited. Suddenly, students who used simple language in their acknowledgements turned into profuse English professors in the methodology and literature review sections. Candidates often use excessive adverbs to appear more knowledgeable or so that the extra words fill the necessary word count. Perplexed, I duly deleted the many repetitions of those annoying and unnecessary transitional words including *moreover*, *furthermore*, and *however* (Busby 2024).

I then wondered if it could be GenAI contributing to this sudden, albeit bland improvement of the dissertations. I have seen some students allow the GenAI to speak on their behalf, believing that this Western tone is what is sought for by academia, and it translates into a loss of personality. Subtle linguistic nuances are not accepted by the AI, which is following tried-and-tested patterns. I would rather read an African English take on research, than the sterile tone of AI.

ChatGPT produces text summarised as five key points, and lo and behold—I was receiving work from students with nifty five-point summaries. It was an instant red flag. I am all for helping students whose language is not English, in using GenAI to help come up with ideas, source pertinent themes, and then write academic work. What I do struggle with is that none of the students, whose work I have proofed, have credited the use of GenAI. It should be duly acknowledged, alongside online articles, printed material, and other sources. To investigate this ethical question, I searched to see which South African institution has a GenAI policy for student research and how to acknowledge its use.

Regenesys Business School offers qualifications in the private and public sectors, but their style guide does not mention the use of AI (Regenesys Business School 2022). The University of Witwatersrand has an overarching thesis guideline policy from 2014 (University of Witwatersrand 2014), but it has not been updated to include AI. North West University (2024) and Cape Peninsula University of Technology (2024) have both published AI codes, while the University of South Africa (2004) published a statement against the use of AI for students. The University of Pretoria, however, has embraced AI and clearly set out how students should use it and duly credit its use (University of Pretoria 2024).

Among the pitfalls of using GenAI in Africa is that I have found that the results given by ChatGPT or Bing's CoPilot are only as good as the easily accessible research work uploaded onto the Internet by the university or the HE institution. Those who neglect to update their websites or do not have good search engine optimisation are not found.

To help future South African students, it is imperative that a short course be offered by the institution to teach students how to use GenAI. The focus should be how to prompt the GenAI specifically to ensure the best results, then clearly indicate how the search took place, and not simply cut-and-paste the results. With guidance, students in Africa will be able to use GenAI to get ahead, while maintaining their academic integrity.

Teaching Effective and Ethical Use of GenAI to Electrical Engineering Students (Vered Aharonson)

Integrating GenAI tools in education raises critical questions about effective use, ethical considerations, and balancing technical and human dimensions. These questions are particularly relevant in Electrical Engineering, where graduates will not just use GenAI as a tool but will innovate and collaborate with it in an AI-driven instrumentation workforce. The study of instruments is pivotal in electrical engineering and spans the students' entire curriculum. Students learn to analyse instruments and to understand how they work. They then learn to use these correctly to solve engineering problems, to modify the instruments, or to design new instruments. Specifically, they learn to justify each choice they make in the use and the design of instruments and to verify their design outputs each step of the way. They do not 'trust' the tools but rather question, reflect, and apply them carefully. Moreover, they are required to balance the technical goals with considerations of societal and environmental impact.

Digital tools, a.k.a. computers, came naturally within the instrumentation teaching and learning. GenAI should have ideally been 'just another new and useful instrument' where the same concepts apply and electrical engineering students possess the necessary technical competencies to understand how AI systems work.

Their curriculum includes topics essential for understanding the algorithms that drive generative AI, i.e., linear algebra, calculus, and probability. They program and use GenAI frameworks, i.e., PyTorch, to build and modify machine learning models. They learn how optimisation relates to GenAI and how it links to engineering problems, i.e., signal processing or control systems. They learn the limitations of the 'black-box' nature of artificial deep learning and the techniques used to interpret these models, i.e., SHAP values. They should, therefore, be able to make the right choices in the 'GenAI instrument' usage.

The past 4 years, however, reflect a worrying trend, where students deviate from the instrumentation principles. This trend entails an over-reliance on and use of GenAI tools without questioning and without verification. This hampers students from developing independent problem-solving skills and leads to a misuse of GenAI capabilities. These pose serious concerns for our future engineers who will use GenAI for analysis, design, coding, and manufacturing.

The full consequences of this problem were slowly absorbed, and reaction was late, but solutions are slowly emerging. A central solution is the requirement for a comprehensive documentation of the student's workflow when using AI in engineering assignments. The students should explicitly state where and how AI tools were used and how were their outcomes validated, i.e., a verification by cross-checking AI-design of circuits with manual or non-AI simulation software. Lecturers should creatively design assignments that include a mix of AI-assisted tasks and tasks that deliberately limit automated solutions, to reinforce intuition and problem-solving skills in mathematical modelling or systems analysis. Importantly, lecturers should introduce more industry-specific ethical dilemmas like algorithmic bias, cybersecurity vulnerabilities, and unintended system failures. Lecturers should refer students to frameworks for responsible GenAI development, i.e., privacy laws such as GDPR and transparency in GenAI systems training and deployment.

Our engineering-education teams need to challenge students to evaluate how reliance on AI can shift accountability in engineering projects, who is responsible—or legally liable—when AI makes the wrong decision? Last, but not least, students should be taught about plagiarism involved in AI-generated work, in both their studies and assignments and then in their professional part within the post-AI workforce.

Rethinking Assessment and Academic Integrity in the Age of AI: a Collaborative Reflection (Nazira Hoosen and Mei Luo)

As professionals working across learning design and academic development, we have observed increasing anxiety around GenAI. A colleague recently shared her experience facilitating a workshop where some academics responded to concerns about student use of GenAI by eliminating essays or written assignments altogether, reverting to sit-in exams and more traditional assessment methods. Now, hearing this made us pause.

Reverting to older methods may appear to uphold academic integrity, but it can also sidestep deeper pedagogical questions. From a curriculum and academic development perspective, such responses reflect an understandable desire for control in uncertain times. Yet they also highlight a disconnect between the graduate attributes we say we value and the assessment practices we put in place. Are we cultivating the ability to think critically, engage ethically, and contribute meaningfully to knowledge, or are we simply prioritising outputs that feel easier to manage? This raises important questions about whether our assessment models truly encourage deep learning or merely facilitate compliance with existing norms, potentially stifling innovation and critical discourse (Boud et al. 2018).

GenAI's capacity to scaffold student thinking offers a transformative approach to assessment, particularly benefiting those entering HE from under-resourced backgrounds, still developing academic literacy, or facing language barriers (Holmes et al. 2019). By providing tailored support, GenAI helps bridge the gap between students' valuable ideas and traditional academic conventions. In contrast, while sit-in exams are often perceived as neutral and equitable, they tend to favour students already adept in academic language and high-pressure environments (Ajjawi, et. al. 2023). Therefore, integrating GenAI-assisted scaffolding within open-ended assessment practices can foster a more inclusive and dynamic learning environment, one that promotes deep reflection, research, and critical argumentation essential for professional success.

Instead of banning GenAI, institutions should be equipping students with the skills to engage with it, critically and ethically. We position GenAI as a learning partner, not a replacement for human thinking, but a tool that supports expression, prompts inquiry, and deepens engagement. This approach aligns with our shared commitment to promoting meaningful, context-aware learning that prepares students for complexity. Furthermore, rethinking assessment necessitates a shift from traditional, one-size-fits-all evaluation models to more nuanced, reflective approaches. This could involve incorporating AI as a formative tool rather than a summative one, where its role is to guide and support learning rather than to determine final grades (Ifenthaler and Gibson 2020).

Ultimately, this moment is not just about the use of AI. It compels us to reconsider what we value in HE and how our assessment practices align with those values. Rather than reverting to more traditional assessment practices that prioritise control and familiarity, we argue for a more thoughtful, future-oriented approach to learning and assessment, one that recognises AI as part of the world students are preparing to enter.

Translating these ideas into practice is not straightforward, especially within the South African HE context, where structural inequalities, varied levels of digital access, and the learning and teaching realities all shape what is possible (Council on Higher Education 2020; Hoosen 2022). These challenges highlight the importance of critical digital pedagogy that is contextually grounded, equity-focused, and responsive to localised learning and teaching dynamics. It also requires engaging with the very real resistance among some academics, who may view GenAI as a threat to established pedagogical norms and underscores the need for a transformative shift in mindset. This tension reflects broader societal anxieties about technology's role in reshaping power dynamics within academia, necessitating collaborative strategies to foster acceptance and integration (Selwyn 2021).

While GenAI offers significant promise for transforming assessment practices, it also brings forth challenges that call for a re-examination of academic integrity. Collaborative reflection among stakeholders is crucial in crafting strategies that leverage the strengths of GenAI while mitigating its risks, ensuring that the future of assessment remains both innovative and ethically grounded. Ultimately, we must seize this moment not only to reexamine our assessment practices but also to collaboratively co-create new models that are pedagogically sound, contextually responsive, and ethically robust, ensuring that the future of HE is both innovative and just.

Curriculum and Pedagogy

GenAI as a Catalyst for Critical Thinking (Prisca Simbanegavi)

The integration of GenAI in education has sparked widespread discussions about its potential benefits and challenges. In my perspective, GenAI has the capacity to significantly enhance teaching and learning experiences by providing well-structured explanations of complex concepts, often in ways that surpass traditional textbooks. The ability of AI to simplify intricate ideas makes it a powerful tool for both educators and students, facilitating deeper understanding and engagement.

From a teaching standpoint, one of the most notable advantages of GenAI is its ability to save time in content creation. Academic staff spend considerable hours designing assignments, assessments, and instructional materials. With GenAI, these tasks can be streamlined, allowing educators to focus more on interactive teaching and student engagement. Moreover, GenAI-driven tools can help tailor learning materials to the needs of individual students, supporting differentiated instruction and promoting inclusivity in education.

However, I strongly believe that the true value of GenAI emerges when it is used as a supplement to traditional teaching methods, rather than a replacement. The most effective learning occurs when students critically engage with the knowledge they acquire. This is why I advocate for meaningful student–lecturer interactions around GenAI-generated content. Rather than passively consuming GenAI-generated responses, students should be encouraged to question, analyse, and apply this information in real-world contexts. In this way, GenAI serves as a catalyst or collaborator for critical thinking, rather than a shortcut to knowledge acquisition.

In many ways, the current debate surrounding GenAI mirrors historical reactions to other technological advancements. I draw parallels to the introduction of the calculator in the 1960 s, which initially faced resistance, with people even taking to the streets to protest its use in education. Over time, calculators became seamlessly integrated into learning, enhancing rather than diminishing mathematical understanding.

Despite its advantages, I maintain that GenAI should be selectively integrated into education, particularly at different academic levels. I firmly believe that GenAI should not be extensively used in undergraduate programs but should be reserved for postgraduate studies. Undergraduate students are still in the early stages of knowledge acquisition, and their learning is primarily based on foundational concepts that require direct engagement with course materials. Since GenAI operates based on the prompts it receives, these prompts must originate from a base of general knowledge. This is the knowledge that students first need to acquire without reliance on GenAI. In contrast, postgraduate students, who already have foundational knowledge, can use GenAI more effectively to enhance their research, analysis, and critical thinking skills.

The role of GenAI in academia should be one of enhancement rather than replacement. If strategically incorporated, it has the potential to transform education, making teaching more efficient and learning more engaging while preserving the essential aspects of human intellectual development.

Should a Higher Education Student Get a Passing Grade for an Assignment Produced by ChatGPT? (Lynn Hewlett and Cecile Badenhorst)

This is a moral and an educational question. In HE, we know that critical thinking is a set of core skills that we value and that we want students to develop. Taxonomies of educational attainment (like Bloom's taxonomy) explicitly reflect evaluation and creativity as the pinnacle of what we expect of graduates. With greater student use of GenAI, are we looking at an over-reliance on technology and possible erosion of critical thinking skills?

What does ChatGPT have to say about this? We asked ChatGPT how we would assess a submitted student assignment generated by ChatGPT using Bloom's revised taxonomy (Anderson and Krathwohl 2001) (Fig. 1) and whether the students should receive a passing grade for this or not. The response indicated that without meaningful engagement, critical analysis (or depth of understanding), or original input, an assignment written by ChatGPT would not meet the criteria for a passing grade for most university-level assignments. In most cases, the piece would not be able to demonstrate achievement at the higher levels on the taxonomy. Not being capable of real time research (beyond its 2021 data set training) or critical evaluation of sources (discerning reliable from unreliable sources) means the output might be more surface-level and weak on the deep analysis or original thought required at the higher level of the taxonomy.

For advice on how to gauge the level of personal input provided by a student in an assignment, ChatGPT's response predictably flagged large language model (LLM) informed strategies, for example, pattern recognition processes involving analysis of shifts in style, checking accuracy of citations, tracking changes in draft document revisions, use of GenAI detection software, and markers' recognition of GenAI patterns (amongst others). These mostly place the burden on markers and involve careful analysis of student writing and argument (or not). This is not a simple task for markers and for students who try to work with AI critically.

Bloom's taxonomy can provide some insight on student writing produced by GenAI (Fig. 1). The higher order thinking skills (analyse, evaluate, and create) rely on lower levels. For example, the strength of the analysis is dependent on the information provided and the understanding of the information (knowledge/remember and comprehension/understand). LLMs, which tools like ChatGPT use, often make up information. These 'hallucinations' are not errors but features of the

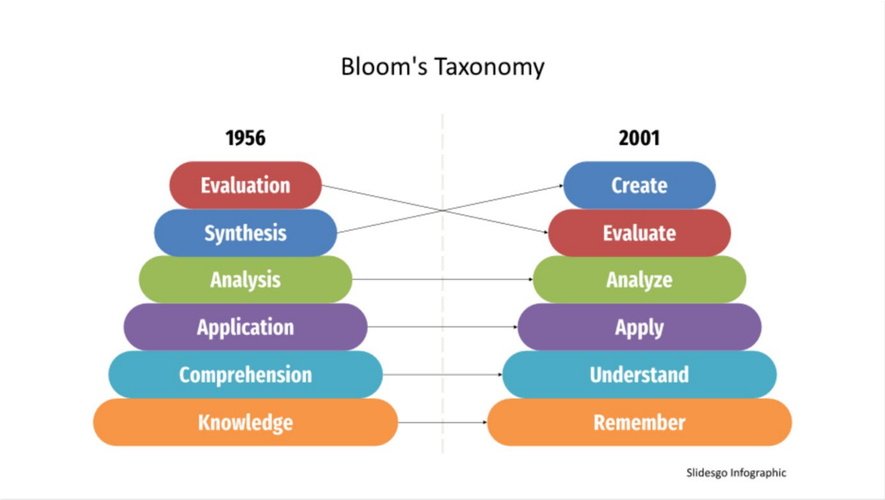

Fig. 1 Bloom's revised taxonomy (Anderson and Krathwohl 2001)

system. These responses are based on the predictive nature of the data and provide a response that is statistically likely based on the training data and the prompt.

For students to move into the higher order thinking skills, they would need to assess the training data used for the model. If a learner does not know the topic area or understand the writing being produced, then they will be unable to analyse or evaluate what is being produced by the GenAI. The ChatGPT response to our prompt even indicated that evaluating the reliability of the sources to make evidence-based judgements would be important for grading the task.

In using GenAI-generated text, students engage with the lower levels of knowledge and the easiest route to a writing product (see Fig. 2). This cognitive offloading of critical thinking skills and its implications is troubling enough, but more distressing is the over-reliance on GenAI, which simplifies concepts and discourages questions or further exploration (Gerlich 2025). If students are going to use GenAI, we need to think about how we can incorporate higher order thinking skills (and what kind) and we need to communicate to students that their own thinking is valuable.

Reflections on Experiments in Pedagogy Using GenAI (Bronwen Wilson-Thomson)

On returning to face-to-face teaching after the Covid-19 pandemic, lockdown, and the move to emergency remote teaching, HE institutions were confronted by the emergence of GenAI. Teaching staff faced increasing pressure from students and faculty to do assessments online. Much of the debate about online assessment centred on the authenticity of students' responses and the validity of online assessments. Curriculum alignment, informed by constructivist approaches to learning (Biggs 1996), focuses on students creating meaning. In this way, assessment is part of a broader context of curriculum development and pedagogical

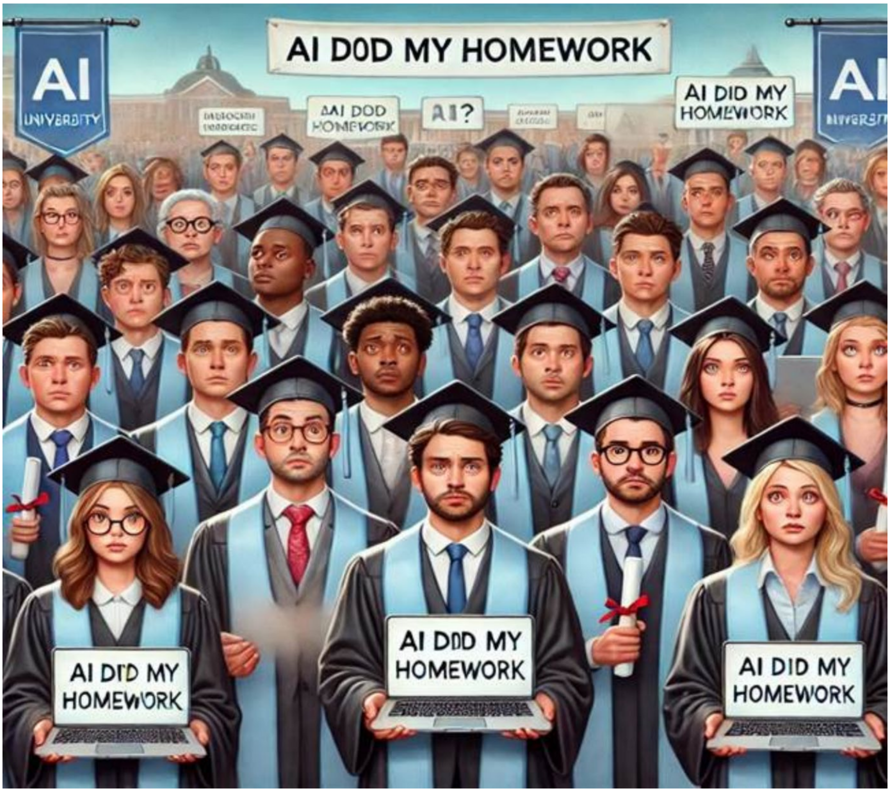

Fig. 2 ChatGPT response to prompt 'Provide an image of university graduates who only used GenAI to complete their degree assignments'

choices (Kusmawan et al. 2025). Assessment needs to go beyond simply assessing whether the content has been taught, recognised, or remembered.

The following experiments illustrate the strengths and weaknesses of using GenAI in assessment and inform practices that support curriculum alignment and meaning-making. In one exam, students were asked to discuss and critique a quote from GenAI. The task required students to integrate knowledge from three different components of the course (curriculum, pedagogy, and assessment). Some students were familiar with GenAI while others were not. Most of the students claimed that they would not use it in assessments. I explained nature of the exam question, a critique and elaboration of a GenAI quote about the key components of the course.

Students worked in pairs to suggest prompts, and the generated text was projected for the class to discuss critically. The lively discussion that ensued resembled a conversation between students and GenAI text. The final assessment was a traditional sit-down exam, which required students to critically discuss a GenAI text provided. Students reported that they had enjoyed the exam despite it being challenging because it required them to show the links between the course concepts, the GenAI text, and to write a coherent response.

Another experiment was a research student who set out to show that GenAI could not be used to teach SePedi, an indigenous language South African language. She had previously found errors in grammar and translation to SePedi in GenAI. The student identified a range of approaches to language learning and generated lessons for each. Although the generated text illustrated the errors she had encountered previously, the range of lessons and teaching materials challenged her to introduce a wider range of methodologies. She re-evaluated the narrow range of pedagogies from her own language learning experience and extended her pedagogic repertoire. She also came to see the errors as useful teaching resources because they reflected errors frequently made and could be built into her teaching. The GenAI generated lessons did not reflect learners' context. Her role as a teacher shifted as she modified texts, selected errors to focus on in lessons, and contextualised the examples given. Where she had previously taught uncritically from pre-planned materials, she did more lesson design with her learners in mind. Kusmawan et al. (2025) showed that learners tend to do better if their teachers are involved in curriculum development.

These case studies show that GenAI can inform assessment, curriculum design, and pedagogical choices. They suggest that a re-evaluation of the dialogue between GenAI, curriculum development, pedagogy, and constructivist learning may be necessary, drawing on theories such as heteroglossia (Bailey 2012) or dialogical pedagogy (Poletti 2024) in which teachers dialogue offers new ways of thinking about the incorporation of GenAI into our teaching practice.

Using A GenAI Text to Promote Critical Reflection (Lee Rusznyak and Dale Langsford)

Ideally, reflection helps student teachers make sense of their classroom experiences, test new understandings, and reframe problems in practice (Schön 1987). However, many tend to report on a lesson rather than analysing key teaching and learning moments or connecting their experiences with educational theory (Rusznyak 2022). The arrival of GenAI introduces another challenge. If students use GenAI tools to write their reflections, they risk bypassing the very professional learning that reflective practice is meant to develop. This raises a crucial question: Without encouraging the use of GenAI to generate reflections, can it be used to support students' understanding of reflective practice?

Our team of teacher educators faced this dilemma as we prepared fourth-year Bachelor of Education students for their final teaching practicum. We also wanted to open a critical discussion about the affordances and limits of using GenAI to write personal reflections on classroom practice. We designed a practice-based research assignment that asked students to:

Select their best classroom reflection to date.
Analyse the quality of their reflection.
Improve their reflection, guided by their analysis.

To prepare students for the assignment, we introduced them to legitimation code theory (LCT) and used an GenAI-generated reflection to model the analysis we expected of them (see Langsford 2025).

The specialisation dimension of LCT (Maton 2014) provides a valuable framework to analyse the extent to which reflections emphasise (i) specialised knowledge and/or (ii) the attributes of its author.

(i) *Epistemic relations* (ER) between the reflection and specialised knowledge are stronger (ER +) when the reflection refers to specific educational concepts or strategies (e.g., the 'Zone of Proximal Development'; 'cooperative learning'). They are weaker (ER –) when referring to unspecified or no teaching approaches or educational concepts.

(ii) *Social relations* (SR) between the reflection and the student teacher are stronger (SR +) when reflections foreground students' personal attributes, beliefs, identities, or emotions. The social relations are weaker (SR –) where the writer distances themselves from personal perspectives.

Combining *epistemic relations* and *social relations* gives rise to four specialisation codes (*knowledge*, *knower*, *élite*, and *relativist*) that reveal how reflections depend on teacher knowledge and/or students' personal attributes.

In a live lecture with 750 students, we prompted ChatGPT to generate a lesson reflection and used LCT to analyse it. Students were immediately engaged, curious to see if ChatGPT could create a reflection comparable to the expectations placed on them. Together, students and lecturers allocated strengths of ER and SR to each sentence (Fig. 3), then plotted the results on a plane to reveal its dominant specialisation code/s (Fig. 4).

Students saw immediately that while ChatGPT's reflection generated interesting-sounding perspectives and feelings, it lacked classroom-specific detail and the conceptual insights expected of them. As one student observed, GenAI 'did not know which incidents in the lesson were most significant and worth describing in detail'. Students made principled suggestions for improvement, conjecturing pathways through different *specialization codes* to enhance the conceptual rigor of the reflection. Students suggested that more meaningful reflection required shifts between detailed description of particular incidents (*relativist* code, ER –, SR –) in addition to sharing their responses and perceptions (*knower* code, ER –, SR +). They suggested increasing the conceptual rigour by strengthening *epistemic relations* and shifting into the 'knowledge' and 'elite' codes.

Through this exercise, students' focus shifts from *writing* reflections to *analysing* and *critiquing* them. They came to recognise that critical reflection requires weaving together contextual detail, theoretical insight, their emotional responses, and personal perspectives. Significantly, students saw that reflections needed more than generic commentary to support their professional learning.

	ChatGPT-generated reflection	Epistemic relations	Social relations	Specialisation code
1	Today's lesson was a valuable learning experience.	ER– –	SR+	*knower*
2	I found the topic engaging and thought-provoking, making it easier for students to stay focused.	ER– –	SR+	*knower*
3	My approach was clear and well-structured, helping students to grasp difficult concepts quickly.	ER–	SR+	*knower*
4	One part of the lesson that stood out to me was when we discussed real-world applications of the theory.	ER–	SR+	*knower*
5	It gave students a deeper appreciation for how the material connects to everyday life.	ER–	SR+	*knower*
6	I felt some of the exercises challenged students, but this pushed them to think critically and expand their understanding.	ER–	SR+	*knower*
7	I also appreciated the group discussion, as hearing different perspectives broadened their view.	ER– –	SR+	*knower*
8	However, students did struggle with one concept, and I plan to review it more on my own.	ER–	SR+	*knower*
9	Overall, students left the lesson feeling more confident and eager to learn.	ER– –	SR++	*knower*
10	This experience has motivated me to stay proactive in my planning and provide further clarification when needed.	ER– –	SR++	*knower*

Fig. 3 Analysis of ChatGPT-generated reflection

Capacity Building for Students, Staff, and Institutions

Developing Aspirant School Leaders for Principalship: Human Intelligence or Artificial Intelligence? (Douglas Andrews and Ruksana Osman)

Within the South African schooling context, our research and the extant literature show that newly appointed school principals are underprepared to meet the challenges of navigating the complexities of an agenda of inclusion and excellence (Walton and Engelbrecht 2024). This thought piece reflects on our tentative experiences of professional development and mentorship for aspirant school leaders ($n = 10$), earmarked for principal roles in high-performance private schools. For this professional development initiative, each aspirant leader was provided with a mentor, an experienced ex-school principal, who provided one-on-one mentoring, and, in addition, each leader was given access to a series of visiting experts who provided leadership workshops on matters ranging from finance and staffing to bullying and different leadership strategies to develop pedagogical approaches to teaching learners with different learning needs. Finally, each aspirant leader was encouraged to use ChatGPT and other GenAI resources to find solutions to problems they face in their daily experiences within the nuanced context of leading in their schools.

The findings from feedback conversations with the aspirant principals provided food for thought. All the participants were under 30 years old and were of a generation who grew up with the Internet and other forms of technology to support their

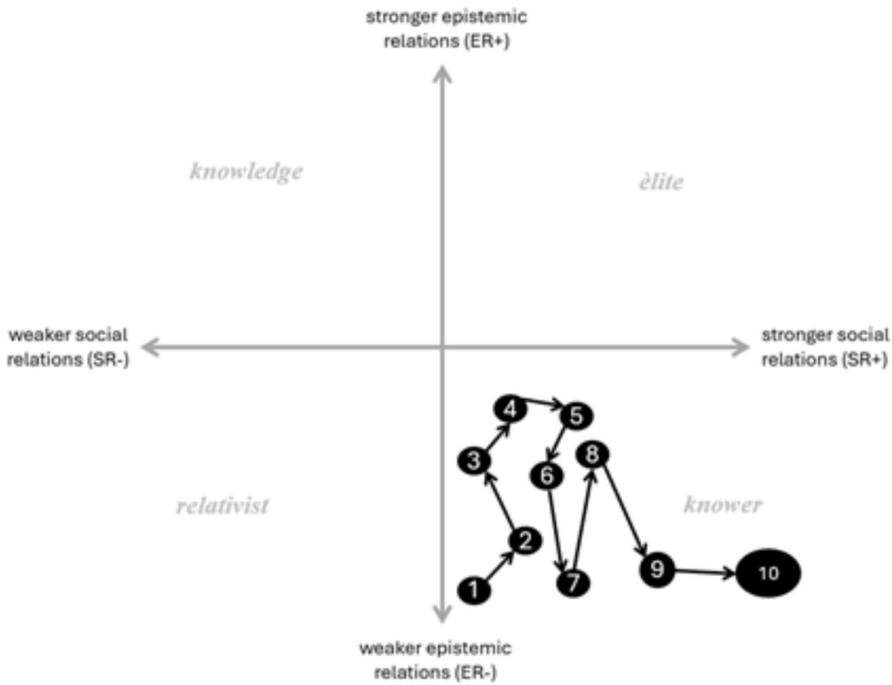

Fig. 4 Specialisation pathway taken by ChatGPT's reflection

learning, teaching, and leading practices. They are comfortable with the expansion of GenAI into their workplace and welcomed the idea of using GenAI to support their learning and leading. In the feedback discussions, they all spoke positively about using GenAI to address a host of administrative tasks that they considered time-consuming, which they felt took away from their interactions with the teachers, learners, and parents.

The participants reported on using GenAI to generate timetables, prepare weekly assemblies, and to provide details on issues related to health and safety, and in one case how to support a teacher with teaching ideas to meet the needs of a child on the autism spectrum. In addition, all the participants reported that daily use of GenAI to support them in their roles as leaders made them feel more professional, as they made fewer mistakes when responding to parent emails or writing up the minutes from a meeting. It was also reported by the participants that after they were encouraged by their mentors to use GenAI to assist them with navigating challenges of promoting inclusive learning, they began to encourage their teachers to do the same.

This resulted in teachers speeding up administrative tasks and focusing more on teaching and learning. This finding supports the work of Tyson and Sauers (2021) that indicated the benefits of GenAI for teachers where GenAI was able to do things in ways that previously would take teachers tremendous amounts of time to complete. Our participants went further to comment on how the introduction of GenAI not only created more 'space' in the day for what they considered the important tasks of teaching, collaborating to solve issues, and researching new pedagogical practices to teach learners with different learning needs.

However, one interesting finding stands out. All the participants reported that GenAI had its limitations. They all felt that GenAI was a useful tool to streamline and speed up perfunctory tasks, but as they developed a rapport with their allocated mentor and built a relationship with the specialists who would visit their schools to run collaborative teacher development, they became less reliant on GenAI. Although the mentors provided specialised knowledge that was readily available through GenAI, it was the human interaction and the emotional relationship or bonds with the mentors that they cherished.

In one example, a newly appointed principal spoke of the loneliness felt in their new position, their pervasive feelings of 'imposter syndrome', needing a safe and supportive space, and the need for human connection. For this participant, there was tremendous value in meeting one-on-one, off the school site, to discuss insecurities and how to deal with contextual problems like personality clashes with members of the community, exhaustion, and dealing with conflict. These findings correlate with those of DeMatthews (2021) who concluded that when principals engage in weekly check-in sessions with a mentor principal, they are able to discuss emergencies, manage stress, and lessen the risks of workplace burnout. This human interaction was described as more impactful than any other form of professional intervention.

Our findings from the conversations show that with young aspirant school leaders who are comfortable with using technology, particularly GenAI in their practice, they still favoured the 'human connection' even though they are familiar with tech, over the value offered by GenAI to expedite efficiency and problem solving. Given the choice between the two, a secure personal and emotional interaction was valued over GenAI.

Between Promise and Paradox: Perspectives on Generative AI in Higher Education (Malcolm Weaich and Sithenjisiwe Dube)

In critically examining the rapid advancement and integration of GenAI in HE, we are repeatedly confronted with a fundamental paradox: Technologies designed to enhance learning and democratise knowledge may, if adopted prematurely and without robust frameworks, inadvertently foster epistemic uncertainty and institutional distrust. This reflection is grounded in our ongoing research and reading, which consistently highlight the dual nature of GenAI, offering both transformative educational possibilities and considerable ethical, epistemological, and practical challenges. At the heart of this paradox lies the imperative for pedagogical responsiveness: the development of comprehensive, transparent, and equitable strategies for the adoption and communication of such technologies within educational contexts.

Through a reflective scholarly process, rooted in peer-led student research networks and shaped by direct engagement with academic communities, we have identified a growing tension within contemporary university settings. While faculties broadly acknowledge the transformative potential of GenAI, many remain hesitant or insufficiently equipped to implement comprehensive ethical and pedagogical frameworks. This disparity is vividly illustrated by our peers' experiences: Some have adopted GenAI with institutional support, while others have faced severe consequences, including expulsion from doctoral programs, for its unauthorised use. Feedback from our international academic networks further reveals this unevenness. In certain disciplines, GenAI is actively promoted as integral to academic practice; in others, it is met with inconsistency or caution.

At our own institution, we have both experienced being encouraged to use GenAI in some courses while being explicitly discouraged in others, often by different members of the same faculty. The potential epistemic rupture introduced by GenAI, whether it marks a paradigmatic shift or an intensification of existing practices, demands deliberate pedagogical responsiveness and critical institutional reflection. In the absence of clear articulation regarding the epistemological assumptions and intended pedagogical role of GenAI, students are left navigating an ambiguous landscape. We argue that such uncertainty threatens to undermine critical thinking and erode students' epistemic agency, both of which are foundational to the mission of higher education. If not addressed through coherent institutional policies and reflective academic discourse, this lack of clarity may compromise the very values universities are tasked with upholding.

As students, we find ourselves precariously positioned between the transformative promise of GenAI and the paradoxical realities of its fragmented institutional adoption. We are continually required to navigate inconsistent expectations, where GenAI is simultaneously encouraged and prohibited, an experience that fosters anxiety, cognitive dissonance, and chronic uncertainty. In such an ambiguous environment, we are often compelled into a defensive learning posture, limiting our capacity for open intellectual exploration out of fear of inadvertently violating academic conduct policies. The psychological toll of this dynamic is significant. The constant vigilance needed to decode contradictory signals from faculty creates sustained stress, which undermines our ability to engage meaningfully with learning.

To fully realise the educational potential of GenAI, and its promise, universities must develop coherent, transparent, and supportive frameworks that prioritise the emotional and cognitive well-being of us, its primary stakeholders. Only then can the integration of GenAI sustain, not compromise, the integrity and vitality of our higher education.

A Need for a Systemic Institutional Approach to Contextual GenAI Implementation in African Higher Education (Rodney Genga)

The accelerating influence of GenAI has catalysed a transformation in how students learn, how staff teach and assess, and how universities function as a knowledge creation ecosystem. For institutions like Wits, and indeed for African HE more broadly, this shift underscores the need for a systemic context-centred response. GenAI is not merely a technological tool but a pedagogical force and integrating it into institutional planning needs to be looked into with foresight, structure, and inclusivity. A systems-based approach is therefore essential to ensure responsible adoption, equity in access, and alignment with local educational contexts and priorities. In response, a small team undertook a cross-faculty study at Wits to explore current usage patterns and perceptions of GenAI. The key findings and insights, from students and staff are summarised below.

Lessons and Insights from Student Feedback on GenAI

Feedback from Wits students reveals that GenAI tools are already embedded in academic routines. With over half reporting strong familiarity and daily or weekly use, tools like ChatGPT are being used for concept clarification, research, and summarization, these usage patterns demonstrate the power of GenAI in enhancing learning and engagement. Conversely, the same feedback points to emerging concerns, such as overreliance, misinformation, and ethical use. This duality of high engagement, paired with significant apprehension, presents a clear call to action. Institutions need to respond, and this can be done through embedding GenAI literacy within curricula and providing students with critical thinking frameworks to use these tools ethically and effectively. Structured training, policy clarity, and contextual guidelines will be key to harnessing student enthusiasm while mitigating risks.

Lessons and Insights from Academic Staff Feedback on GenAI

Academic staff are also actively exploring GenAI, with most being familiar with the tools and many integrating them into teaching, research, and administrative workflows. However, the lack of policy clarity within the HE sector, standardised training, and ethical oversight could lead to inconsistencies in how GenAI is used and understood across universities. At the same time, the staff survey revealed strong interest in further dialogue and engagement on the use of GenAI in HE. These findings underscore the need for institutions to look into capacity-building, professional development, and ethical frameworks around GenAI.

Integrating Feedback into a Contextual GenAI Implementation Framework Designed for African HE

What emerges from this feedback is not simply a list of challenges, but a blueprint for action. The path to GenAI implementation needs to be contextual, rooted in the realities of African HE systems, resource constraints, and digital divides. A robust institutional framework is required that connects policy, pedagogy, and practice. It must include inclusive access strategies, policy and ethical governance, student empowerment and training, staff capacity building, upskilling, cross-faculty collaboration, and locally relevant curriculum enhancements.

African universities should not just adopt GenAI, they should actively contribute to the shaping of its use in ways that align with their educational missions, foster innovation, and prepare students to be critical thinkers and ethical users of powerful new technologies.

Staying Grounded in The Storm: Recentring Learning in The Age of Pervasive Artificial Intelligence Developments (Catherine L Tam)

GenAI Technologies Were Not Used in The Production of This Writing

Disruption is not new to the global HE landscape. In South Africa, over the last decade, higher education teachers have navigated the Fees Must Fall movement, overnight moves across modes of learning during and after the Covid-19 pandemic, and most recently, the release of GenAI technologies. We can expect GenAI technology developments to take place at an increasingly rapid rate. Within this context, reactive GenAI-focused decision-making could have educators trying to hold educational programmes together with emergency triage measures.

Furthermore, when GenAI is given centre stage in our educational decision-making practices, there is a tendency to ask unhelpful questions that promote false binaries and treat GenAI as a singular agentic force (Suchman 2023) as with questions like 'is GenAI good or bad?' or 'should we embrace or ban GenAI use?'. The pervasive integration of diverse AI technologies into systems entrenched in our work and private lives, makes individual (rather than social and political) attempts to control these systems (originating from systems of labour control; see Whittaker 2023) and the use of them, a disempowering struggle.

An alternative approach is in line with resilient pedagogy's principle of centring learning interactions in course design (Thurston et al. 2021). Instead of individuals needing to be resilient in the face of a bombardment of GenAI-technology-driven-changes in our landscape, HE teachers could recentre learning interactions to navigate pervasive GenAI disruptions. While these educational interactions can involve GenAI at times, these technologies are a component of the architecture of engagement still inclusive of learners, teachers, and content (Thurston et al. 2021; Moore 1989). The inclusion of different interactions and learning activities across a course allows for rich learning experiences (Laurillard 2013) that can be personal, critical, imaginative, creative, transformative, authentic, and challenging (Tam and Wales 2024). Within these dynamic learning environments, GenAI can be both topic and resource.

GenAI-related topics (from the dangers of GenAI for the climate and democracy to the potential for life saving GenAI medical interventions) can be powerful vehicles for critical thinking and important updates to curricula. GenAI as a resource in education can be used *for* learning (in much the same way that assessment can be *for* learning) (see Gipps 1994). A guiding question for grounded decision-making around GenAI use in a learning activity (whether it is assessed or not), is whether interaction with technologies could support or enhance learning or bypass it.

Consequently, teachers should make and communicate course and learning activity design decisions around the *if*, *why*, *what*, *when*, *where*, and *how* of GenAI interactions in relation to learning objectives. The antidote to reactive triage measures in teaching and learning can be the design and facilitation of rich learning environments, built on interactions characterised by reciprocal transparency and communication around GenAI as a topic, and a resource for learning.

Shared Recommendations

Considering *GenAI and societal implications*, Shalini Dukhan first warned against naïve interpretations of a platform of equal opportunity, recommending revised curriculum design to circumvent inequalities where students leave to seek work, having used GenAI with little academic integrity. Kershree Padayachee and Laura Dison then remind us that, for South Africa, disruptions are always present. Amid an almost paradigmatic shift, we now need to avoid hasty summative assessment and require students to explain their thinking processes and concepts to avoid simply regurgitating content, just because GenAI tools enable this. Milton Milaras affirmed that 'assessment as usual' is no longer an option. In South Africa, simply focusing on 'correct' assessment outcomes based on content reproduction misses the imperative of transformative (decolonial) teaching of critical thinking, in order to enact epistemic justice. Students remain the losers in this situation.

Next, addressing questions of *ethics, potential bias, transparency, and integrity*, Alex Smit-Stachowski evidenced how students who previously used simple language are now allowing GenAI to speak on their behalf, believing that this Western tone is what is sought for by academia. This translates into a loss of personality and authentic contextual contributions. Faced with conflicting institutional policies, students in South Africa need critical skills to use GenAI to get ahead, while maintaining their academic integrity and identity. Vered Aharonson shared challenges faced by South African electrical engineering graduates, who need to innovate in an GenAI-driven workforce and consider societal and environmental impact. A worrying over-reliance on GenAI tools without verification requires more creative design of assignments to limit automated solutions and reinforce problem-solving skills for industry-specific ethical dilemmas when GenAI makes the wrong decisions. Nazira Hoosen and Mei Luo pointed to where institutions are driving a disconnect between the graduate attributes we say we value, and the restrictive assessment and compliance practices we still put in place. In South Africa, where structural inequalities and varied levels of digital access shape what is possible, instead of banning GenAI, institutions should be equipping students with the skills to engage with it critically and ethically, as a learning partner for professional success beyond education, not a replacement for human thinking.

Under *curriculum and pedagogy*, Prisca Simbanegavi argued that GenAI can simplify intricate ideas for students and save teachers time to focus more on interactive teaching and student engagement. GenAI tools can tailor learning materials to the needs of individual students, supporting differentiated instruction and promoting inclusivity in education. However, foundational knowledge is key so that GenAI can be applied effectively to enhance research, analysis, and critical thinking skills. Lynn Hewlett and Cecile Badenhorst imaginatively challenged ChatGPT to recognise its own limitations using Bloom's revised taxonomy. The GenAI's response offered insights where writing produced by GenAI lacked higher level skills, reinforcing a need to communicate to students that their own thinking is valuable.

Bronwen Wilson-Thompson shared examples of moving beyond simply assessing whether content has been taught and remembered. Common GenAI errors can be a useful teaching aid and concerns about using GenAI for assessment can inform critical curriculum design and pedagogical choices. Lee Rusznyak and Dale Langsford shared a detailed example of theory enacted, by using GenAI to teach teachers to reflect. While ChatGPT gave the impression of being a 'knower', it lacked the classroom-specific detail and conceptual insights expected in preservice teaching. The exercise though deepened understanding of what constitutes an exemplary reflection and sharpened ability to analyse enacted codes, identify missing ones, and suggest meaningful improvements.

Finally, addressing *capacity building for students, staff, and institutions*, Douglas Andrews and Ruksana Osman shared how South African newly appointed school principals used GenAI to speed up perfunctory tasks. Yet, as they developed a rapport with their human mentors and specialists, they became less reliant on GenAI. It was the human interaction and emotional relationship that they cherished to counter loneliness and pervasive feelings of 'imposter syndrome'. Malcolm Weaich and Sithenjisiwe Dube suggested that faculties remain hesitant or insufficiently equipped to implement comprehensive ethical and pedagogical frameworks around GenAI. Whilst some peers have adopted GenAI as integral to their disciplines, others have faced severe consequences, including expulsion from doctoral programs, for its unauthorised use. Without clear articulation regarding the epistemological assumptions and intended pedagogical role of GenAI, students are left navigating an ambiguous landscape that fosters anxiety, cognitive dissonance, and chronic uncertainty. This erodes students' epistemic agency and capacity for open intellectual exploration. If not addressed through coherent institutional policies and reflective academic discourse, the very values universities are tasked with upholding are at stake.

Rodney Genga then shared research undertaken with Wits staff and students that underlines the need for a systemic institutional approach to contextual GenAI implementation in African HE. Much more than a list of challenges, findings call for a blueprint for action that critically connects policy, pedagogy, and practice, where implementation is contextual, and rooted in the lived realities of African HE systems. Finally, Catherine L Tam problematises a promotion of false binaries that treat GenAI as a singular agentic force, resulting in a disempowering struggle. Instead, we need to recentre learning interactions to navigate pervasive GenAI disruptions. The antidote to reactive triage measures is the design and facilitation of rich, critical, learning environments, built on interactions characterised by reciprocal transparency and communication around AI as topic *and* resource for learning.

Concluding Thoughts

Beginning with a very deliberate pause, to create space to escape the hype and undertake a meaningful postdigital dialogue, there is a clear call from contributors in South Africa both to 'stay grounded in the storm', acknowledging that disruption is hardly new to the African HE landscape, but also for reciprocal listening and pedagogic responsiveness that leads to action. These co-authors have provided deeply contextual evidence as to why HE can no longer rely on regulatory enforcement or technical fixes, but needs to govern differently (Arantes 2025). Contributors have drawn on their lived experiences to illustrate where GenAI joins a 'complex interplay between assessment purpose, conceptions of quality, and the impacts of these on achieving social justice in higher education' (Padayachee and Matimolane 2025:112).

Intriguingly, this firstly prompted a return to some major foundational thinkers in educational philosophical reflection (Schon), situated learning (Lave and Wenger), and curriculum and assessment design theory (Biggs, Blooms, etc.), as a reminder of what human critical thinking underpins much of our HE practices. This was accompanied by a clear message though that, amid a paradigmatic shift, 'assessment as usual' is no longer an option if we are to ensure that the future of HE is both innovative and just.

In the age of GenAI then, a detailed critical review of the social contract that underpins our universities to fulfil their relationship to social justice and opportunity is key (UNESCO 2021; Hayes et al. 2024). Authors argue unanimously that foregrounding fundamental assessment design considerations and transcending the flaws which GenAI has exposed in our governance is necessary for the postdigital university to produce future critical thought-leaders and problem-solvers.

We must move quickly now, beyond surface level, technically managed compliance, to develop a more dynamic, relational GenAI governance with inclusive policies that draw on lived experiences and fundamental critical pedagogical theory. This calls then for this postdigital dialogue to continue, as a critical GenAI exchange across the wider global HE community and with our cross-sector partners in our communities. With this in mind, we now pass the floor to our open reviewers to share their impressions from their own locations in South Africa and the UK.

Open Review 1: A Postdigital Dialogue with the Global Context (Paul Prinsloo)

This collaborative article contains contributions (insights, perspectives, think-pieces, and reflections on the contributor(s)' empirical research) on a central theme arising from a specific in-person event between an HE institution in the UK and one HE institution in South Africa. The title promises to provide 'perspectives from South Africa on GenAI in higher education' but also to present (or to invite) a 'postdigital dialogue with the global context'. Several questions come to mind. What makes this dialogue a *postdigital* dialogue or would phrasing the dialogue as a 'dialogue *about* the postdigital' be closer to the intention and outcome? To what extent do the insights, perspectives, think-pieces, empirical research, and reflections in this article provide a picture of GenAI in South African HE, with its 26 public universities? Lastly, for now, to what extent do the contributions constitute a postdigital dialogue *with the global context*?

Central to the article is the intention to recreate the dialogue that took place during an in-person event 'in the spirit of *Ubuntu* and via a *postdigital* lens, bringing together vital local knowledge to demonstrate why context always matters deeply'. Ubuntu, in the context of this article, constitutes the ethos of this engagement, but also of the article as defined by the authors:

> The role of Ubuntu, understood as human interconnectedness and dignity (Waghid et al. 2002), contributes to pedagogical responsiveness via three aspects of human action. Firstly, spanning local and indigenous concerns and embracing intra-human relations; secondly, through deliberative and autonomous human action, by listening and talking back; and thirdly, through a global orientation that affirms respect and compassion beyond the local community to embrace all humanity, and challenge oppression and exclusion wherever it manifests.

Interestingly, the notion of Ubuntu refers to the entanglement of human lives where my *being* human is constituted in my relationships with other humans, and vice versa. Reflecting on postdigital understandings of our increasing, and de facto (or is it post de facto?) entanglement with *non-human* actors, reflections on GenAI need to consider how hybrid and non-human algorithmic decision-making systems impact on our *being human*, our *being-together as humans*, but also on what we consider knowledge to be, what it means for coming-to-know and knowing. What does posthuman, postdigital Ubuntu look like where we are shaped by commercial deployments of large language models (LLMs) without any recognition of authorship, intellectual property, and copyright?

Integral to Ubuntu's underpinnings of human interdependence and inter-relationality is *human language*. Languageis not only a form of communication but also performative makings of who we are as human. We therefore should consider what happens to Ubuntu and our inter-dependence as constitutive to being human when language the becomes the language of a machine brain constituted of stolen words, thoughts, and images creating a 'new common world, a new common sense, and *new ordinations of reality and power*' (Mbembe 2024: 24) (emphasis added).

The contributions in this article provide a sense of authors' realisation that the world is changing—that their worlds are on fire—but it would seem as if the authors in their various respective roles in an HE institution are too busy putting out fires, that there is no time to consider *how the fire changes us*, and how to live with a fire that seemingly consumes the central role of HE, namely to produce knowledge, to disseminate research findings, and to validate knowledge claims, not to mention relations with communities and academic citizenship.

Though many of the insights, perspectives, think-pieces, and reflections on the contributor(s)' empirical research presented in this article resemble experiences of teaching staff and researchers in HE also in other contexts, I was hoping to see a more urgent awareness of specific sociomaterialities of post-apartheid South Africa shaping teaching and influencing the use of GenAI by students and staff alike. The vast majority of students in South African HE are second or third-language English speakers. With a schooling system—both primary and secondary school education—that does not prepare students sufficiently for post-school education—the implications of GenAI are immense. Let us add the reality of an unemployment rate of 32.9% with youth joblessness at 62.4% (South African Government 2025), and graduate unemployment of 11.5% (Woosey 2025). Combine this with the intergenerational legacy of colonialism and apartheid on local languages and knowledges and ways of making sense of the world, with the creation of a 'new common world, a new common sense, and new ordinations of reality and power'—it is clear that teaching staff on their own cannot put out this raging fire.

On a more formal level, the different contributions vary in approach and narrative structure and tone—which may add to the richness—but which also makes it difficult for the reader to (at least for this reviewer) to make sense of understandings/expectations of the scholarly nature of this approach. There are think pieces/reflections that may fall into very broad categorizations of autoethnographic research, to presentations of empirical findings, to reflections on authors' empirical findings. As such, the different contributions provide a kaleidoscope of insights and thoughts resembling the sound of a raging fire, or of chairs moving on a sinking Titanic. There are, however, also glimpses of agency, of taking charge often without managerial support and/or understanding. And that, gives me (some) hope.

Open Review 2: The Decolonial Perspective (Nicolás Ruiz, Rovincer Najjuma, and Michael Gallagher)

Amidst the AI hype, it is refreshing to read a contextualised reflection about GenAI in HE. In this article, the authors presented several perspectives on the use/non-use of GenAI in the South African HE context, with recommendations for a shift beyond compliance to a new critical and relational GenAI governance. These perspectives aimed to speak from the pedagogic responsiveness of Ubuntu, understanding Ubuntu as a life-view that centres on interdependence and moral responsibility (Osman and Walton 2022). In our review, we argue that authors see in GenAI a didactical and emancipatory potential, while overlooking the geopolitical and (de)colonial tensions of their context. Nonetheless, in their arguments, foregrounded in the four thematic areas of the paper, we see the seeds of a postdigital majority world thinking: where technological tools (as modernity itself) can be emancipatory agents for learning design, assessment, and social justice in HE. Conversely, digital spaces afforded by GenAI can 'form digital territories that, like physical spaces, have the propensity to become sites of extraction and exploitation, and thus sites of digital-territorial coloniality' (Mohamed et al. 2020: 665).

In this dialogue, we see important educational arguments about the use/non-use and regulation of GenAI in South African HE. For instance, several dialogists stress how GenAI provides an opportunity to highlight existing structural shortcomings in assessments, while others see GenAI as an ally to assess authentically and beyond traditional assessments that search for correct answers. Thus, the authors make a valuable invitation to return to educational thinkers and theory when asking the GenAI question in HE, highlighting the importance of regulating GenAI. This invitation needs to be integrated with an AI decoloniality agenda that addresses the inherent coloniality in AI design to re-conceptualise the proposed pedagogical use and regulatory framework of AI.

All of the dialogists also highlight the possible shortcomings of using GenAI in their specific contexts of practice. For instance, Aharonson explores how GenAI is undermining the use of instrumentation principles in electrical engineering students, as students tend to over-rely on and lack critical thinking in their use of GenAI. Hewlett and

Badenhorst critique ChatGPT using Bloom's taxonomy, finding that it lacked higher-level thinking. And Milaras, being mindful about South African sociopolitical contexts, highlights how GenAI can perpetuate epistemic injustice and colonial dynamics, necessitating redress through decolonial AI alignment to the underlying values of Ubuntu.

This being said, it is crucial to consider how the context presented in the dialogue overlooks the geopolitics of GenAI and reifies a singular narrative of development. GenAI can be a technology of dispossession and (epistemic) violence as it is entangled in sociomaterial networks of natural resources, knowledge, data, and labour that depend on international dynamics (Ricaurte 2022). In the spirit of Ubuntu, it is important to make visible and generate educational processes that interrogate the justice and injustice in the inherent interconnectedness of GenAI. To truly contextualise GenAI, further research is needed to understand how South Africa, and its pluriversal contexts, relate to the sociomaterial network that makes GenAI possible, including data ableism and disablism that potentially reproduces algorithm coloniality (Charitsis and Lehtiniemi 2022).

This brings us to a second point: It is vital to continue the decolonial and emancipatory dialogue when thinking about the incorporation of GenAI into HE by questioning the singular narrative of digital development (Ruiz et al. 2025). This singular narrative of digital development tends to be connected to discourses of modernisation (Ruiz and Gallagher 2025), bringing to the forefront the concept of 'modernity'. As modernity and coloniality are two sides of the same coin (Castro-Gómez 2021; Dussel 2025), it becomes a political task to contextualise the colonial elements of modernity, for example, through problematising (Bacchi 2012; Rahm 2023) modernising narratives, practices, policies, and imaginaries of GenAI within South African HE.

In this political practice, we see some echoes of Castro-Gómez's (2024) transmodern approach to generate a majority world perspective towards GenAI as modernising technology. Castro-Gomez's transmodernism invites us to transcend cultural essentialisms found in decolonial theory. Cultural essentialism imagines an *other* outside modernity and eurocentrism; some decolonial theorists propose returning to that *other* in a rejection of European values and the whole project of modernity. On the other hand, transmodernism as a decolonial practice recognises that modernity has reconfigured all otherness: There is nowhere to return. Instead, Castro-Gomez (2017) proposes universalising the interests of those excluded and oppressed by colonial structures. Those excluded by colonialism have the perspective to transform the systems that exclude them: Their interests become universal when they transform those systems. Then, here, the task becomes asking who is excluded by/from GenAI and how their interests can inform universalising transformations of South African HE. Such can be the seed for a postdigital majority world action within South African HE.

Open Review 3: Perspectives from South Africa on GenAI in HE Underpinned by Ubuntu (Emmanuel Nartey)

This manuscript offers a thoughtful and timely contribution to the evolving discourse on GenAI in HE. Its distinctive value lies in its commitment to a situated analysis, rooted in the specific dynamics of South Africa's HE system and underpinned by Ubuntu as a philosophical, ethical, and pedagogical framework. In a field often shaped by technocratic and depoliticised narratives, the authors' integration of African epistemologies and dialogic methodology marks a significant and welcome intervention (Waghid and Waghid 2023; Prinsloo 2018).

The dialogical approach, grounded in a series of conversations among South African academics across diverse disciplines, brings forth a rich plurality of perspectives. This method challenges homogenised accounts of GenAI, revealing how understandings of AI are relationally constructed within specific institutional and disciplinary contexts. In doing so, the manuscript contributes a compelling epistemological insight: Knowledge about GenAI does not emerge in a vacuum, but through asymmetrical entanglements shaped by local histories, pedagogical traditions, and material conditions. The polyvocal narrative echoes Jandrić's (2019) concept of postdigital dialogue and aligns closely with the ethics of care and mutual responsibility central to Ubuntu.

The authors further challenge dominant portrayals of GenAI as neutral or universally beneficial, drawing attention to its potential to reinforce existing structural and epistemic inequalities. Within a post-apartheid educational landscape marked by linguistic exclusions and resource disparities, the paper highlights how GenAI may inadvertently reproduce colonial hierarchies if uncritically adopted. For example, Milaras foregrounds the importance of cultural grounding in GenAI pedagogy, while Aharonson's reflections on engineering education raise pertinent concerns about the displacement of hands-on learning by algorithmic abstraction.

The invocation of Ubuntu throughout the manuscript is persuasive, positioning it as a relational ethic capable of informing both classroom practice and broader educational governance. There is also opportunity to develop this further by engaging more directly with the work of Metz (2014) on Ubuntu as a moral theory, or Waghid and Waghid's (2023) articulation of Ubuntu pedagogy. This would deepen the theoretical scaffolding and further support the manuscript's critique of the extractive logics underpinning AI systems (Ricaurte 2022; Mohamed et al. 2020).

There is also considerable potential to extend the discussion of the sociomaterial conditions that shape GenAI. Engaging more fully with Global South scholarship on data colonialism, infrastructure politics, and algorithmic dispossession (Charitsis and Lehtiniemi 2022; Ricaurte 2022) would enrich the manuscript's analysis of the global political economy in which GenAI is embedded. Concepts such as Castro-Gómez's (2024) transmodernity or Dussel's critique of modernity/coloniality (Dussel 2025) could further illuminate how discourses of innovation are imported into South African HE under the guise of reform, reinforcing rather than dismantling entrenched hierarchies.

The concluding reflections provide a strong basis for elaborating practical and policy-oriented implications. Expanding on ethical protocols, digital literacy frameworks, or curriculum design principles grounded in Ubuntu would strengthen the manuscript's contribution to educational practice. Comparative examples—from Ofqual's (2024) guidance and Joint Information Systems Committee's (2011) digital literacy initiatives to Finland's *Elements of AI* programme (University of Helsinki 2021)—could be used not as prescriptive models, but as points of contrast that reinforce the importance of locally attuned, justice-oriented approaches.

This paper makes a vital and original contribution to scholarship on GenAI, pedagogy, and decolonial practice. Its integration of African philosophies, relational ethics, and critical engagement with technological futures positions it to influence both academic discourse and institutional transformation.

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Declarations

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