



Advancing Students' Academic Excellence in Distance Education: Exploring the Potential of Generative AI Integration to Improve Academic Writing Skills

RESEARCH ARTICLE

KGABO BRIDGET MAPHOTO

KERSHNEE SEVNARAYAN

NTSHIMANE ELPHAS MOHALE

ZULEIKA SULIMAN

TUMELO JACQUILINE NTSOPI

DOUGLAS MOKOENA

*Author affiliations can be found in the back matter of this article



ABSTRACT

This qualitative study explores the potential of generative artificial intelligence (AI) to improve the academic writing skills of a large student cohort within the context of a distance learning institution. Utilising qualitative methods, the research explores diverse approaches and applications of generative AI to elevate teaching and learning experiences. Grounded in socio-cultural theory and a human-AI collaboration framework, the study highlights the synergistic interplay between human intelligence and generative AI capabilities. Email interviews with lecturers, focus group discussions with students, and informal discussions with markers on a WhatsApp group helped researchers to (1) understand lecturers' perceptions of generative AI integration in the Academic Writing module, (2) explore students' perspectives on the potential of generative AI as a guide in the Academic Writing module, and (3) examine the potential of generative AI on students' motivation to enhance their academic writing skills. Findings from the study reveal that the potential of generative AI has a positive impact on teaching and learning experiences, providing innovative opportunities for academics. This research contributes to the discourse on the intersection of generative AI and education, reiterating the innovative potential of generative AI in redefining pedagogical strategies and shaping the future of distance learning.

CORRESPONDING AUTHOR:

kgabo bridget maphoto

University of South Africa,
South Africa

maphokb@unisa.ac.za

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Research highlights the challenges students face in academic writing due to ‘unpreparedness’ and a lack of skills (Altınmakas & Bayyurt, 2019; Hassan et al., 2021; Ilham et al., 2020; Khalo, 2021; Lentz, 2020; Mohale, 2023; Sağlamel & Aydoğdu, 2022). Academic success is contingent on acquiring these skills. In response to ‘academic unpreparedness’, there is a growing reliance on generative artificial intelligence (AI)-powered writing tools (Dehouche, 2021; Eaton et al., 2021; Kumar et al., 2022; Perkins, 2023; Wilder et al., 2021). Generative AI is a tool wherein artificially created applications demonstrate intelligence to not only meet but exceed assigned tasks (McLean et al., 2023; McLean & Osei-Frimpong, 2019). This definition encapsulates the adaptability of catering to cultural and demographic considerations. In education, these intelligent applications create a personalised and inclusive educational environment that resonates with the unique requirements and perspectives of students from various cultural and demographic backgrounds. The evolution of technology, particularly generative AI, has led to the integration of technology-assisted learning in Academic Writing modules (Malik et al., 2023; Zulfa et al., 2023). Generative AI tools like large language models (LLMs), machine translators (MTs), digital writing assistants (DWAs), automated paraphrasing tools (APTs), and Chat Generative Pre-Trained Transformers (ChatGPT) are gaining traction, impacting academia, and raising concerns about academic misconduct (Naidu & Sevnarayan, 2023; Roe et al., 2023). Applications like automated writing evaluation (AWE), automated essay scoring (AES), and automated writing feedback (AWCF) aim to enhance the writing curriculum (Koltovskaia, 2020; Nazari et al., 2021), contributing to advanced teaching and learning experiences by facilitating assessment, tutoring, content generation, and feedback for both lecturers and students. For Malik et al. (2023, p. 1):

[AI] and academic essay writing merge to create a transformative intersection in education, each reciprocally refining and reforming the other. AI, through its innovative technologies and flexible learning strategies, elevates academic writing by offering dynamic, interactive learning settings, and personalized educational journeys.

Furthermore, generative AI writing tools such as ChatGPT afford students the technological advancement to generate human-like responses. According to Van Dis et al. (2023, p. 615):

ChatGPT can create well-written student essays, summarise research papers, answer questions well enough to pass medical exams, enhance academic writing, and generate helpful computer codes.

The integration of AI-powered writing tools brings substantial challenges to higher education institutions (HEIs), especially in distance education (DE). Concerns surrounding the integration of generative AI in academic contexts encompass academic misconduct, over-reliance on technology, authenticity issues, and the promotion of passive learning (Adedoyin & Soykan, 2020; Bygstad et al., 2022; Dey, 2021; Naidu & Sevnarayan, 2023). Efforts to mitigate academic misconduct have led to the widespread adoption of Turnitin, a plagiarism detection software, by 15,000 HEIs across 140 countries (Mphahlele & McKenna, 2019). However, its effectiveness is contested, as argued by Mphahlele and McKenna (2019), who suggest that it primarily functions as an instructional tool rather than exclusively for plagiarism detection, thus challenging prevailing assumptions. Turnitin’s limitations become apparent when confronted with instances of plagiarism generated by AI, especially when such content includes extensive quoting from diverse databases. The integration of generative AI presents significant challenges for educational institutions striving to uphold academic standards while promoting genuine learning experiences. Recent studies have showcased positive outcomes from integrating generative AI into Academic Writing modules, revealing students’ enthusiasm for utilising AI tools to enhance engagement and alleviate monotony (Schmohl et al., 2020; Zulfa et al., 2023). Beyond improving writing skills, generative AI stimulates students’ interest in technology-supported learning and encourages critical perspectives (Schmohl et al., 2020; Strobl et al., 2019). However, the existing research gap lies in understanding the optimal balance between human intelligence and generative AI capabilities within pedagogical frameworks, necessitating further exploration within the research community. Hence, this article explores the potential of generative AI integration to improve academic writing skills and advance the

academic excellence of students, particularly in DE. The overarching research question guiding this study is:

- What are lecturers, students, and markers' perceptions towards the use of generative AI on academic writing skills in the context of ODeL?

To answer the research question above, the following sub-research questions were formulated:

- What are lecturers' perceptions of using generative AI to teach students academic writing skills?
- How do students perceive the use of generative AI as a potential guide through the academic writing process?
- How can generative AI motivate students to improve their academic writing skills?

LITERATURE

PERCEPTIONS OF STAKEHOLDERS ON GENERATIVE AI

Recent technological developments have seen an increase in integrating generative AI tools like ChatGPT, Pro Writing Aid, word processors, and Grammarly into teaching and learning environments, with many lecturers supporting this integration within university contexts (Koka et al., 2023). These tools are perceived as diagnostic instruments aiding in error identification, structural improvements, and enhancing various linguistic features of writing, connecting with the notion that generative AI promotes student responsibility in learning by providing insights and suggestions for improvement (Don, 2021; Hibert, 2019; Palermo & Wilson, 2020). However, alongside the positive impacts, scholars such as Aljohani (2021), Khalil and Er (2023), and Sevnarayan and Maphoto (2024) have raised concerns regarding generative AI's potential role in plagiarism. These concerns have prompted proposed measures to reduce plagiarism risks, including altering assessment methods and establishing usage rules for generative AI tools (Alam & Mohanty, 2022; Lukowicz, 2023; Nguyen, 2023). Despite some hesitations, recent studies by Kiryakova and Angelova (2023), suggest a positive attitude among university lecturers toward integrating generative AI, particularly ChatGPT, into teaching practices. However, concerns persist regarding ethical usage, potential fraud, plagiarism, and privacy issues (Adiguzel et al., 2023; AIAfnan et al., 2023; Tao et al., 2019). Moreover, there is a noted gap in digital competencies among students and lecturers, which poses challenges to the effective and ethical integration of generative AI tools in HEIs (Ausat et al., 2023; Kohnke et al., 2023). Bozkurt (2024) provides a thorough analysis of the implications of integrating generative AI tools in academia and emphasises the necessity of transparent reporting for maintaining academic integrity. Bozkurt (2024) suggests practical solutions to address ethical concerns and highlights the responsibility of human authors for content integrity. Further sentiments by Bozkurt (2024) echo the importance of human oversight alongside AI assistance to uphold scholarly rigor and ethical standards.

STUDENTS' PERCEPTIONS AND ATTITUDES

Understanding students' perceptions of generative AI's role in academic writing is crucial amidst the transforming educational context. Students exhibit a range of perspectives, from optimism regarding generative AI's potential to enhance the writing process to reservations about over-reliance and concerns regarding creativity and authenticity (Cotton et al., 2023; Dwivedi et al., 2023). These perceptions reflect the complexities in the relationship between students and generative AI, influencing their acceptance or resistance to its integration into academic writing (Chan & Hu, 2023). While students appreciate efficiency improvements and personalised learning facilitated by generative AI, they also express concerns about learning curves, data privacy, and depersonalisation (Sallam, 2023). Notably, generative AI integration has shown significant developments in writing quality, grammar, vocabulary, plagiarism reduction, creating a conducive learning context, and enhancing engagement (Zulfa et al., 2023). However, concerns persist regarding plagiarism detection and the potential impact on students' writing authenticity (Khabib, 2022; Fitriq, 2023).

Generative AI's integration in education provides efficiency, quality, and learning opportunities, transforming academic writing into a continuous learning process (Chang et al., 2023; Jeon, 2022). It creates personalised feedback, enhances iterative improvement, and motivates students through gamification strategies, enhancing engagement and intrinsic motivation (Bennani & Maalel, 2022; Dichey et al., 2014). Through recognising achievements and providing clear pathways for skill advancement, generative AI empowers students to enhance their writing capabilities and develop a positive attitude toward academic challenges (Alam, 2021; Chassignol et al., 2018). Moreover, generative AI tools assist in plagiarism detection and guide students in adapting their writing styles, further enhancing learning outcomes (Khabib, 2022; Fitria, 2023).

While the literature indicates various benefits of generative AI integration in academic writing modules, it is critical to address the biases and inconsistencies present in existing studies. These include concerns regarding plagiarism, ethical usage, privacy issues, and the need for digital competencies among stakeholders. In addition, further research should focus on exploring students' perceptions in more depth and addressing their concerns about authenticity, creativity, and data privacy. Moreover, future studies should explore the long-term effects of generative AI integration on academic writing skill development and student learning outcomes in diverse educational contexts.

THEORETICAL FRAMEWORK

The integration of generative AI for improving academic writing skills can be effectively investigated through socio-cultural theory (SCT), a framework that focuses on the role of social interaction and cultural context in cognitive development (Scott & Palincsar, 2013; Shabani et al., 2010; Zhou, 2020). Developed by Lev Vygotsky, SCT provides a significant perspective for exploring how generative AI operates within the zone of proximal development (ZPD) to provide support and scaffolding for students' academic writing skills (Allal & Ducrey, 2000; Chang & Sun, 2009). This theory enables researchers to examine the social aspects of language learning with generative AI and consider interactions between students and the tool, as well as the cultural context within which academic writing learning takes place (Baskara, 2023; Cai, Lin & Yu, 2023; Lantolf, 1993). The SCT informs a human-AI collaboration framework by highlighting cultural, social, and contextual influences and encouraging understanding between human creativity and technological learning systems.

The human-AI collaboration framework highlights the critical role of trust in generative AI adoption and identifies limited awareness as a hurdle to widespread acceptance (Glikson & Wooley, 2020; Mahmud et al., 2022; Xu et al., 2023). This framework explores the potential of generative AI, particularly LLMs, to enhance academic writing skills by serving as catalysts for productivity, quality, and creativity in writing projects (Bell, 2023; Dergaa et al., 2023; Golan et al., 2023; Huang et al., 2022). It highlights the long-term significance of engaging with LLMs for educational empowerment, noting their adaptive interactivity and real-time feedback capabilities, akin to the historical effectiveness of one-to-one tutoring models (Lin, 2023; Yan, 2023; Nazari, Shabbir & Setiawan, 2021). This collaborative approach not only addresses current challenges and opportunities in generative AI integration for academic writing, but it also signifies an impact on both short-term project outcomes and long-term educational empowerment.

METHODS

RESEARCH CONTEXT

This study centres on online distance learning modules offered by a South African open distance e-learning (ODeL) university, with an annual enrolment of around 500,000 students from 132 countries, including Nigeria, Namibia, Zimbabwe, India, Congo, Ethiopia, the United States of America, and China. The student body is diverse, representing various financial, linguistic, and social backgrounds, with ages ranging from 18 to 70. The Academic Writing (WRI124) module, situated within the Department of English Studies, is an undergraduate program that focuses on enhancing students' proficiency in academic English, critical reading and writing skills. The module aims to cultivate students' capacity to engage with academic genres across

diverse disciplines and contexts. This includes honing skills in argumentative and discursive essay writing, crafting research-based essays and articles, understanding conventions for citation, and developing research skills. WRI124 caters to a diverse student body, comprising both native English speakers and those who speak English as an additional language. WRI124 is a fully online module, and all assessments are conducted online via the Moodle learning management system (LMS). Classes are conducted through Microsoft Teams, and all activities are posted on the LMS. Most students pursue part-time studies while working full-time, and they come from different ethnicities, including Black, White, Coloured, Indian, and Asian, predominantly from middle- to low-income families. Many students, residing in remote areas with limited internet access, complete assessments through cell phones or local internet cafes.

In this context, this investigation transpired in the initial phase of ChatGPT's introduction. The researchers observed an increase in the utilisation of ChatGPT within assignments throughout the first semester of 2023. This resulted in a palpable sense of helplessness among lecturers, prompting uncertainty about how to effectively address this emergent issue. The deployment of generative AI exhibited a discernible degree of disorder, as students excessively relied on its functionality to aid them in online assessments. It is noteworthy to highlight that while students demonstrated adeptness in using this technology, a conspicuous digital divide emerged wherein some lecturers either struggled to employ it or failed to comprehend the rationale behind students' pervasive usage. This disjunction captivated the researchers, motivating a comprehensive exploration into this particular dimension within the integration of generative AI in the WRI124 module. The generative AI system demonstrated a remarkable capacity to address virtually all questions posed on assessments by lecturers. Consequently, students adeptly manipulated this tool to their advantage, particularly in online assessments. It is imperative to highlight that lecturers refrained from utilising generative AI as a pedagogical tool; thus, this study does not constitute a pilot study. The principal aim was to meticulously examine the prospect of using generative AI to ascertain its potential to augment the development of students' academic writing skills.

RESEARCH METHOD

The qualitative design adopted in this study is not merely incidental but is deemed paramount. It was selected to address the critical and multifaceted dimensions inherent in the integration of generative AI within the WRI124 in a DE context. This qualitative study adopts an exploratory approach, signifying its open-ended nature conducive to the understanding of in-depth insights (Griffin, 2016). Furthermore, it aligns itself with an interpretive study, denoting the researchers' commitment to analysing and interpreting the meaning inherent in the collected data within its contextual framework (Walsham, 2006). The employment of discussions and interviews stands as the principal methodological choice, strategically employed to explore phenomena. This method aims to reveal rich insights from a mega-enrolment module (Ponelis, 2015) to understand if generative AI can be pedagogically used in Academic Writing modules to enhance students' academic writing skills.

RESEARCH DESIGN

This research study embraces a phenomenological approach to understand the essence of the phenomenon of generative AI under exploration as it is experienced by the participants. According to Wright-St Clair (2014) and Hall et al. (2016), this methodological choice enabled the researchers to understand the dynamics between students, lecturers, and markers and the potential integration of generative AI within the WRI124 module. Phenomenology, with its roots embedded in the exploration of lived experiences, positions itself as a powerful lens through which to discern the deep layers of participants' experiences enhanced by generative AI. Through a phenomenological research design, the study aims to comprehend experiences, providing a depth of insight that surpasses mere observations.

DATA COLLECTION INSTRUMENTS

Utilising a qualitative methodology, this research embarks on an exploration of the manifold approaches and applications of generative AI to enhance the pedagogical context of teaching and learning experiences (Ponelis, 2015). To address the three research questions, a triangulation of research instruments was strategically deployed, utilising the strengths of each

to provide a comprehensive understanding of the potential influence between generative AI and academic writing.

The three chosen research instruments; e-mail interviews, focus group discussions (FGDs), and a WhatsApp group discussion were deliberately selected to facilitate a multifaceted exploration (Asiamah et al., 2017; Campbell et al., 2020; Hennik, 2013; Tasker & Cisneroz, 2019). E-mail interviews, designed in alignment with the framework proposed by Hunt and McHale (2007), served as an invaluable tool for asynchronous communication with lecturers. This method facilitated the systematic gathering of detailed information on technical reliability, multimedia integration, engagement strategies, communication dynamics, and collaborative aspects of incorporating generative AI within the WRI124 module.

To augment and enrich the qualitative data, an FGD and a WhatsApp group discussion were concurrently employed. These methods, under the approaches delineated by Tasker and Cisneroz (2019), enabled an in-depth exploration of the generative AI tool's impact on academic writing skills. The deliberate choice of multiple instruments, coupled with the concurrent use of diverse platforms, not only ensured methodological triangulation but also added layers of depth and richness to the gathered data. Challenges encountered, particularly delayed responses in the asynchronous email interviews, were methodically addressed. Structured schedules were implemented, and trained observers were enlisted to enhance the efficiency of the communication process with lecturers (Dahlin, 2021). Data availability is restricted in accordance with the confidentiality guidelines established by the university's ethics approval committee.

POPULATION AND SAMPLING

The study comprises a population of approximately 14,000 students enrolled in the WRI124 module. Twenty (20) lecturers who teach first-year students from the Department of English Studies were sent email interviews and were labelled 'Lecturer 1', 'Lecturer 2', 'Lecturer 3', 'Lecturer 4', and so on for anonymity (Griffin, 2016). 20 student participants were invited to take part in an FGD through the module Telegram group and were named 'Student 1', 'Student 2', 'Student 3', and so on. In addressing the third research question, the researchers engaged thirty (30) markers to contribute their insights on a WhatsApp group regarding how generative AI can motivate students to enhance their academic writing skills (Tasker & Cisneroz, 2019). Markers were labelled 'Marker 1', 'Marker 2', 'Marker 3', and so on. The purposive sampling method that was used to select lecturers, students, and marker participants is justified in a qualitative study to ensure a focused and in-depth exploration of perceptions within the target population (Campbell et al., 2020).

RESEARCH PROCEDURE

The research adopted a multifaceted approach to explore stakeholders' perceptions of integrating generative AI into academic writing practices at an ODeL university. Data was collected during the second semester of 2023 (November and December). To answer the first research question on lecturers' perceptions of generative AI integration in academic writing, 20 lecturers were sent email interview questions. Of the 20 emails sent to lecturers, only 12 responded. Responses from lecturers were collected over two weeks. To answer the second research question on student perceptions, students were invited to an FGD through the module Telegram group. Of the 20 students who accepted to be part of the FGD, only 12 joined the Microsoft Teams discussion, which lasted about 45 minutes. To answer the third research question, questions were posed to markers in the module WhatsApp group. The group consisted of 30 markers; however, only 10 markers participated in the discussion. The researchers coded the data, and it was organised into the following themes:

1. Lecturers' perceptions of generative AI use in the WRI124 module.
2. Students' perceptions of the use of generative AI as a potential to guide them through academic writing.
3. The potential of generative AI to motivate students to improve their academic writing.

The construct validity of this study is integrated with the theoretical frameworks, which ensures a coherent discussion. This integration is complemented by an alignment with prior research studies, which positions the research within a broader academic context and strengthens the study's theoretical underpinnings.

To enhance content validity, the research employs a multifaceted approach by incorporating diverse data collection instruments, including e-mail interviews with lecturers, an FGD with students, and a WhatsApp group discussion with markers. This choice aims to explore stakeholders' perceptions regarding the potential of generative AI for enhancing academic writing skills. Through the employment of triangulation data collection methods, the study not only widens the scope of the explorations but also strengthens the credibility and richness of the gathered insights.

The validity of this research is highlighted by the creation and rigorous review of research questions. These questions, designed with precision, underwent a rigorous validation process led by the researchers' adeptness in educational technology and qualitative research within the team. This approach ensures that the research questions resonate with the core objectives of the study and enhances the trustworthiness and relevance of the study.

In terms of reliability, the study adheres to stringent measures to instill confidence in the consistency and dependability of the findings. Inter-rater reliability is rigorously maintained during email interviews, emphasising uniformity in the interpretation of responses. Consistent purposive sampling across diverse stakeholders further contributes to the study's reliability, ensuring a representative and varied perspective. Moreover, standardised data collection procedures are systematically implemented, minimising variability and enhancing the reproducibility of the study's outcomes.

ETHICAL CONSIDERATIONS

Permission to collect data was granted by the research ethics committee at the university under study, and the ethical clearance number is Ref: 90268091_CREC_CHS_2022. The name of the university, the module, and the students have all been given pseudonyms to protect the identities of all participants and the institution. The researchers obtained informed consent from all participants, explaining the purpose of the study and the voluntary nature of their participation. Participants' identities were kept confidential; hence, names were anonymised to ensure the privacy and protection of identities. The researchers ensured that all the collected data was stored securely and in compliance with data protection regulations. Participants were provided with a debriefing at the end of the study, explaining the purpose of the study and how their data would be used.

FINDINGS

LECTURERS' PERCEPTIONS OF GENERATIVE AI USE

Balancing Tradition and Technology

The lecturers reveal a critical perspective on the balance between traditional and technological approaches to academic writing. Lecturer 1 (2023 email interview) noted, "Learning academic writing may require one to immerse themselves traditionally. AI can serve as a great tool, but the student would have to take the responsibility of using AI to practice or learn rather than as a quick fix." This insight rightly emphasises the significance of immersing students in traditional writing methods, cautioning against the misuse of generative AI as a shortcut while stressing student responsibility in its proper utilisation. Similarly, Lecturer 2 (2023 email interview) highlights, "There's merit in both traditional and technological approaches. AI can aid learning, but students must understand it is a tool. Their responsibility is key in utilising AI effectively." This perspective emphasises the value of both traditional and technological methods while also stressing the importance of students viewing generative AI as a tool rather than a shortcut. Yet, a deeper examination could explore practical strategies for promoting this understanding among students. Furthermore, Lecturer 3 (2023 email interview) provides a holistic viewpoint by stating, "We need to find a balance between traditional writing skills

and the advantages AI offers. It's not about replacing one with the other but integrating them for comprehensive learning." While this approach acknowledges the strengths of both methods, further discussion could explore steps for achieving this balance in academic writing pedagogy, considering curriculum design, pedagogical methods, and potential challenges in integration. Thus, while each lecturer provides insights, critical discussion prompts exploration into the implications of their perspectives and recommendations for lecturers to integrate traditional and technological methods in teaching practices. The findings above emphasise the necessity of finding harmony between tradition and technology. While generative AI is recognised as a significant tool, caution against its misuse was reiterated by lecturers. The integration of traditional and generative AI-driven approaches emerges as a potential path for holistic learning. Lecturer 2's emphasis on student responsibility aligns with the notion that lecturers should guide students in striking a balance between using generative AI responsibly and following traditional methods of learning. However, Lecturer 3 introduces the idea that integration is about complementing traditional methods rather than substituting them entirely, creating a balanced perspective.

Technological Adaptation in Language Learning

This theme explores adapting to technological advancements in language learning, emphasising the understanding of generative AI's implications while cautioning against its overreliance. According to Lecturer 4 (2023 email interview), "The focus should be on understanding AI's implications for enhancing language learning. However, I do warn against students using technology to do homework and assignments for them." Similarly, Lecturer 5 (2023 email interview) advocates, "In today's digital era, adapting to technology is crucial. AI can enhance language learning, but it's a supplement, not a replacement. Caution is needed against technology replacing essential human effort." Lecturer 6 (2023 email interview) further adds that students should use AI as a tool to amplify their efforts, not as a substitute for active engagement in learning. The findings highlight generative AI's positive potential in language learning but stress caution against its misuse, emphasising its role as a supplement rather than a replacement. Lecturer 6 adds a note of caution, stressing the need for active student engagement alongside generative AI use. While Lecturers 4 and 5 advocate for caution, Lecturer 6 introduces a layer of complexity by emphasising the importance of active student engagement rather than passive learning.

Responsible Generative AI Use in Writing Skill Development

In the exploration of generative AI as a tool for enhancing writing skill development, Lecturer 7 (2023 email interview) advocates for a balanced approach, stating, "Students should be taught to write by themselves while using AI to correct their original texts, then compare their original to the corrected texts." This perspective highlights the importance of independent writing, with AI assistance limited to correction and comparison. Lecturer 8 (2023 email interview) acknowledges AI's value in writing skill development but emphasises student responsibility, asserting, "AI is a tool for writing skill development. However, students must be guided to write independently. AI can correct and enhance, but the responsibility of writing remains with the students." This aligns with the notion that AI should supplement rather than replace human effort in writing. Lecturer 9 (2023) further reinforces this idea, highlighting, "Writing skills are honed through personal effort. AI can assist in refinement, but students need to actively engage in the writing process for genuine skill development." While all three lecturers recognise the potential of generative AI in refining writing skills, Lecturer 9 introduces a critical element of active student engagement for authentic skill development. Lecturers 7 and 8 contribute to a comprehensive understanding by highlighting the need for guidance and independent writing, respectively. Lecturer 8's emphasis on guiding students aligns with the idea that lecturers should actively shape AI's use. Lecturer 9 introduces an interesting perspective by stressing the importance of active student engagement alongside generative AI assistance, emphasising the mutual relationship between technology and human effort in writing skill development.

The Role of Lecturers in Guiding Generative AI Use

In addressing the critical role of lecturers in guiding students on generative AI use, Lecturer 10 (2023 email interview) indicates, "We should play a pivotal role in guiding students on AI

use. Clear instructions and expectations can prevent misuse and help students harness the full potential of AI in their academic writing journey.” This affirms the importance of clear guidance from lecturers to prevent misuse and optimise AI’s benefits. Similarly, Lecturer 11 (2023 email interview) stresses, “Guidance from lecturers is crucial. We need to demystify AI’s role, set expectations, and empower students to use it responsibly as a tool for academic improvement.” This aligns with the notion that lecturers should empower students to use AI responsibly while dispelling any misconceptions about its capabilities. Lecturer 12 (2023 email interview) further expands on this, asserting, “Our role extends beyond teaching content. We should guide students in using AI as a supportive tool, ensuring it aligns with the learning objectives of the academic writing module.” This reiterates the broader responsibility of lecturers to integrate AI effectively into the curriculum. The findings maintain the pivotal role of lecturers in guiding generative AI use for students, accentuating the importance of clear instructions and demystifying AI’s role. Lecturer 12’s views on adhering to academic standards highlight implications for integrity and ethical considerations. Lecturers’ active involvement emerges as a recurring theme, underlining their crucial role in facilitating responsible and effective AI utilisation in academic writing.

STUDENTS’ PERCEPTIONS OF THE USE OF GENERATIVE AI AS A POTENTIAL TO GUIDE THEM THROUGH ACADEMIC WRITING

Initial Scepticism and Apprehension

In the focus group discussion, it became evident that first-year students, particularly those for whom English is a second language, often harbour initial scepticism towards integrating generative AI into academic writing. Student 1 (2023 FGD) expresses uncertainty, stating, “Honestly, I’m not sure about relying on AI for writing. English isn’t my first language, and it’s already tough because my home language is isiXhosa. Can a computer really understand what I’m trying to say ...?” This sentiment reflects concerns about AI’s ability to comprehend language expressions, especially in multilingual contexts. Student 2 (2023 FGD) echoes apprehension, suggesting, “I feel like it might be a shortcut. What if it ends up changing my style, or makes me sound less like me? What if my lecturer picks up on that and I fail my assessment? I want my own voice.” This highlights fears of generative AI altering personal writing style and compromising authenticity, potentially impacting academic performance. Student 3 (2023 FGD) voices distrust, stating, “I’m worried about how much I can trust AI and ChatGPT with something as personal as my writing. It’s like, what if I follow its suggestions and my marks suffer?” This finding reinforces concerns about AI’s reliability and its implications for academic success. However, Student 10 (2023 FGD) presents a contrasting view, seeing AI as a potential asset, remarking, “I think AI could be a game-changer. It might understand and give me more clarity and ideas on things that I could have missed, and if it improves my marks, I will give [it] a chance.” This perspective emphasises AI’s potential to enhance clarity and generate new ideas, suggesting a willingness to embrace its benefits. While scepticism dominates, Student 10’s viewpoint punctuates the diversity of student perspectives, indicating that not all students perceive generative AI as a threat to their individuality or academic integrity.

Hope for Assistance and Improvement

The findings reveal an optimistic outlook among students regarding the potential assistance generative AI could provide in improving their writing skills, particularly in addressing grammar and structural challenges. Student 4 (2023 FGD) articulates, “I really struggled a lot with grammar and structure in my essays. If AI can help me fix those issues, I’m open to it. Maybe it can be like a writing coach that’s available whenever I need it.” This reflects a desire for generative AI to serve as a readily available resource for addressing specific writing concerns, contingent on proper guidance from lecturers. Similarly, Student 5 (2023 FGD) envisions generative AI as a supportive companion, stating, “I think if it’s like a friend that is available 24/7, guiding me and giving me tips, that could be helpful. I need all the support I can get to make my writing better.” This showcases the importance of user-friendly generative AI interfaces and comprehensive guidance from lecturers. Student 6 (2023 FGD) emphasises the practical benefits of generative AI assistance, noting, “It could save me a lot of time and stress, especially when deadlines are looming.” However, Student 11 (2023 FGD) introduces a critical perspective, expressing concern about potential complacency and stating, “I worry that relying too much on AI might make me lazy. What if I stop trying to

improve on my own because it does the work for me? Exercising our brains is healthy too.” This highlights the importance of maintaining students’ motivation for independent improvement despite AI assistance. While students express optimism about AI’s potential benefits, Student 11’s viewpoint reveals the need for a balanced approach to AI integration, ensuring that it supplements rather than replaces students’ efforts to improve their writing skills.

Concerns about Authenticity and Learning

Concerns about the authenticity of learning experiences when relying on generative AI emerge from the findings. Student 7 (2023 FGD) expresses worry, stating, “I’m worried that if I use AI too much, it might feel like I’m not really learning. I do find this module difficult, but at the end of the day, I want to know that I passed on my own strength. I want to get better at writing on my own, not just rely on ChatGPT for instance.” This sentiment asserts concerns about excessive dependence on generative AI potentially undermining students’ self-reliance in learning. Student 8 (2023 FGD) raises a crucial question about the quality of AI suggestions, stating, “How do I know if the suggestions from AI make my writing better or just more ‘correct’ in a technical sense? I want my writing to be both good and true to who I am.” This highlights the importance of a critical understanding of improvement beyond technical correctness to maintain authenticity in writing. Student 9 (2023 FGD) voices scepticism about AI’s ability to grasp cultural complexities, stating, “AI might help with surface-level stuff, but what about the deeper aspects of writing? Will it understand cultural experiences and perspectives that are important in my work?” This indicates concerns about AI’s limitations in understanding the cultural context of students’ writing. However, Student 12 (2023 FGD) presents a contrasting view, regarding AI as an efficiency tool that complements creativity, stating, “I see AI as a tool for efficiency. It won’t replace my creativity, but it could save time on editing, allowing me to focus on the more critical aspects of my essay writing.” This perspective highlights the potential for AI to enhance productivity and streamline the editing process, suggesting a positive outlook on its role in writing. While concerns about overreliance on generative AI and its impact on authenticity prevail, Student 12’s viewpoint provides optimism regarding its efficiency-enhancing capabilities.

THE POTENTIAL OF GENERATIVE AI TO MOTIVATE STUDENTS TO IMPROVE THEIR ACADEMIC WRITING

Caution and Concerns about Setting a Precedent

Markers express a shared concern about the potential risks associated with integrating generative AI, particularly regarding the establishment of a precedent that could encourage shortcuts and compromise educational integrity. Marker 1 (2023 WhatsApp group) succinctly states, “Setting a precedent that might bite us in the end.” This highlights the apprehension about unintended consequences stemming from AI integration. Marker 3 (2023 WhatsApp group) insists on the importance of hard work, stating, “There is no substitute for good old-fashioned hard work. Embracing AI too readily could risk diluting the essence of what we value in education.” This reflects a traditional perspective, prioritising the fundamental value of effort and dedication in education. However, Marker 10 (2023 WhatsApp group) introduces a more optimistic viewpoint, suggesting that generative AI can serve as a motivational tool if strategically implemented, stating, “AI can be incorporated to motivate students. When students are aware that the lecturers can spot AI-copied work, it may reduce the high rate we experienced. However, we need to be cautious and strategic.” This perspective sees generative AI as a potential solution to address plagiarism issues while acknowledging the need for caution in its implementation. The disagreement among markers revolves around whether generative AI is perceived as a shortcut or a motivational tool and highlights the complexity of balancing technological integration with educational values.

Generative AI as a Tool for Learning and Teaching

Markers converge on the notion of generative AI as an educational tool when employed thoughtfully. Marker 2 (2023 WhatsApp group) advocates, “Including AI in our teaching would be beneficial for both students and academics. We can leverage AI as a supplementary tool, stressing its potential for understanding concepts.” This highlights the potential of generative AI to enhance learning outcomes by providing additional support and promoting comprehension.

Similarly, Marker 5 (2023 WhatsApp group) expresses forward-thinking optimism, stating, “I think AI is the tech for the age. Embracing AI is a forward-thinking move, but it requires us, as teachers, to be well-versed in its technology and capabilities.” This perspective narrates the importance of lecturers’ readiness to adapt to technological advancements in education. However, Marker 7 (2023 WhatsApp group) introduces a cautionary perspective, maintaining the need for students to use AI as a tool rather than copying verbatim, stating, “I use it all the time in my job as a writer. Students should be taught to use it well; it’s a tool. You don’t copy it verbatim. That’s not learning. That’s copying/plagiarism.” This note highlights the potential pitfalls of over-reliance on AI and the importance of critical engagement with generated content. While markers recognise generative AI as a tool for learning and teaching, Marker 7’s perspectives suggest that not all markers may fully endorse generative AI as an unproblematic educational tool.

Teaching Responsible Generative AI Use

Markers align in advocating for responsible generative AI use. “Students can be taught how AI can serve as a brainstorming tool to enhance their thinking... allowing them to understand how AI can complement their creativity rather than replace it” (Marker 6, 2023 WhatsApp group). Marker 8 (2023 WhatsApp group) views generative AI as a tool that can enhance students’ writing, indicating the importance of teaching how it can positively impact learning while cautioning against irresponsible use. Marker 9 (2023 WhatsApp group) maintains the potential of incorporating AI in teaching academic writing and stresses the need to teach responsible use. While markers accentuate teaching responsible generative AI use, the focus shifts toward its motivational potential. Marker 6 highlights AI’s role as a brainstorming tool to enhance creativity. Marker 8 introduces a critical perspective, discussing the need to penalise irresponsible AI use. The discussion in the WhatsApp group concludes by emphasising the balance markers must strike between encouraging generative AI utilisation for motivation and maintaining academic integrity.

DISCUSSION

The discussion in this section is organised around the research questions and corresponding findings from the previous section.

WHAT ARE LECTURERS’ PERCEPTIONS OF USING GENERATIVE AI TO TEACH STUDENTS ACADEMIC WRITING SKILLS?

In exploring lecturers’ perspectives on the integration of generative AI in the WRI124 module, an interesting divergence emerges and captures a multifaceted dialogue among lecturers. Amidst the prevalent concerns about potential misuse and the temptation of shortcuts for skill acquisition, lecturers also recognise and appreciate the inherent benefits of generative AI tools (Bansal et al., 2019; Glikson & Wooley, 2020; Lukowicz, 2023). This recognition highlights the transformative nature of the discourse and acknowledges the dual facets of generative AI as both a potential challenge and an asset in the academic writing context. The human-AI collaboration framework, a pivotal aspect of this discussion, not only emphasises the need for trust in generative AI adoption but also aligns seamlessly with the persistent call from lecturers for responsible use (Bozkurt, 2024). It positions generative AI not as a mere quick fix but as an integral learning tool, a stance echoing the principles of SCT. Within the context of Vygotsky’s ZPD, lecturers stress the responsibility of students to actively engage with generative AI as a scaffold, a support system requiring their active participation in the learning process (Allal & Ducrey, 2000; Shabani et al., 2010). This relationship between trust, responsibility, and active involvement shapes a holistic understanding of generative AI’s role in academic writing skill development. Furthermore, the integration approach advocated by lecturers aligns not only with the principles of SCT but also resonates with the concept of mixed-initiative decision-making (Bansal et al., 2019). This approach acknowledges generative AI as a supplementary tool, complementary to essential human effort rather than a replacement (Adiguzel et al., 2023; Tao et al., 2019). Lecturers emphasise the necessity of balance, encouraging generative AI utilisation for correction and comparison while safeguarding the essence of independent student writing (Iqbal et al., 2022; Seeber et al., 2020). This perspective emphasises a balance between technology and human agency and suggests an urgent need for pedagogical strategies that are tailored to address this complexity in generative AI integration within academic writing curricula.

HOW DO STUDENTS PERCEIVE THE USE OF GENERATIVE AI AS A POTENTIAL GUIDE THROUGH THE ACADEMIC WRITING PROCESS?

Students' perspectives on the utilisation of generative AI in the WRI124 module form diverse views which are influenced by skepticism, hope, and a keen awareness of authenticity concerns and echoes the cautionary sentiments expressed by researchers regarding the potential risks of overreliance that may compromise the authenticity of students' work (Cotton et al., 2023; Dwivedi et al., 2023; Qiao & Zhao, 2023; Woithe & Filipec, 2023). These complex perspectives reflect the discourse surrounding the integration of generative AI in academic writing, where students grapple with the dual-edged nature of technological assistance. Amidst the prevalent fears of generative AI potentially altering individual writing styles, a subset of students emerges, expressing a sense of optimism about the technology's potential to assist in overcoming specific writing challenges. This optimistic outlook resonates with scholarly discourse portraying generative AI as a supplementary tool, particularly effective in addressing issues related to grammar and structural elements in writing (Alam & Mohanty, 2022; Chan & Hu, 2023). It suggests an acceptance among students of generative AI's role as a facilitator rather than a disruptor in the writing process. SCT provides a lens through which to understand the dynamics of students' perceptions. Acknowledging the significant influence of students' peer interactions, and cultural contexts, SCT provided in-depth insights into the multifaceted shaping of students' views on generative AI. The ZPD concept within SCT notes the importance of steering clear of excessive dependence on generative AI to encourage a more self-directed learning approach (Allal & Ducrey, 2000; Chang et al., 2023; Jeon, 2022; Shabani et al., 2010). The alignment between findings and the SCT lens, coupled with insights from the human-AI collaboration framework, indicates the balance required in the collaborative relationship between students and generative AI (Jain, Garg & Khera, 2023; Lukowicz, 2023).

HOW CAN GENERATIVE AI MOTIVATE STUDENTS TO IMPROVE THEIR ACADEMIC WRITING SKILLS?

The discussions among markers concerning the integration of generative AI into academic writing provide a multifaceted view that mirrors sentiments expressed by students. While markers exhibit optimism about the strategic use of generative AI as a motivator and efficiency tool (Alam & Mohanty, 2022; Lukowicz, 2023; Zulfa et al., 2023), a critical question is: How can generative AI motivate students to improve their academic writing skills? A thorough examination reveals certain aspects that warrant careful consideration. Markers acknowledge generative AI as a significant educational tool, consistent with the SCT perspective, which positions it as scaffolding for students in academic writing development (Chang & Sun, 2009). However, the cautionary note introduced by some markers, particularly regarding the risk of verbatim copying and the emphasis on the importance of interpretation (Fitria, 2023; Khabib, 2022), introduces a counterargument. This aligns with broader concerns raised in the literature about the potential drawbacks of generative AI, including the need for students to develop critical thinking and interpretation skills (Bozkurt, 2024; Zulfa et al., 2023). While markers express optimism regarding generative AI's role as an efficiency tool, their wary stance introduces a potential contradiction. The literature supports the idea that generative AI can enhance creativity and support learning, but the need for vigilance against verbatim copying highlights a potential tension point (Alam & Mohanty, 2022; Zulfa et al., 2023). The shared views on responsible generative AI use and motivation are in sync with the broader discourse, emphasising the importance of guiding students to use generative AI meaningfully (Alam & Mohanty, 2022; Zulfa et al., 2023). However, the potential risks associated with irresponsible use raise questions about how effectively current pedagogical strategies address these concerns.

WHAT ARE LECTURERS, STUDENTS, AND MARKERS' PERCEPTIONS TOWARDS THE USE OF GENERATIVE AI ON ACADEMIC WRITING SKILLS IN THE CONTEXT OF ODEL?

In addressing the overarching research question on the perceptions of lecturers, students, and markers towards generative AI use in ODeL, the findings portray diverse perspectives. Lecturers recognise the potential benefits of generative AI and advocate for its integration as a supplementary learning tool within a pedagogical framework, emphasising the importance of responsible use and avoiding shortcuts in skill acquisition (Lukowicz, 2023). This aligns with

their perspective on maintaining a balanced approach and encourages generative AI use for correction and comparison while preserving the essential human effort in independent student writing (Iqbal et al., 2022; Seeber et al., 2020). Students, on the other hand, exhibit diverse attitudes influenced by peer interactions, cultural contexts, and concerns about authenticity. The need for tailored approaches is evident to accommodate varied learning preferences and underlines the balance required in the collaborative relationship between students and generative AI (Chang et al., 2023; Jeon, 2022; Naidu & Sevnarayan, 2023; Shabani et al., 2010). Markers' perspectives align with both lecturers and students and acknowledge the potential benefits of generative AI as a motivator and efficiency tool while expressing concerns about misuse and verbatim copying. The shared emphasis on responsible use and motivation resonates with broader discussions on the importance of teaching students how to use generative AI thoughtfully and supports the ongoing discourse surrounding the careful integration of generative AI into education (Alam & Mohanty, 2022; Zulfa et al., 2023). This analysis highlights the need for a critical and context-specific approach to generative AI's integration in ODeL and emphasises the crucial elements of trust, responsible use, and continuous evaluation to optimise the positive impact on academic writing skills.

LIMITATIONS

Miles (2017, p. 2) defines limitations as “constraints that cannot be controlled in a study.” One key limitation is the study's focus on a single English language module, limiting its relevance to other subjects and module structures. Additionally, since the study is exploratory, it does not recommend a specific generative AI system for DE universities, potentially affecting the findings' applicability. To address these issues, future research could expand the study to include multiple language modules or disciplines for a better understanding of generative AI's impact. This would involve testing different generative AI systems to determine their effectiveness across various educational contexts.

CONCLUSION AND RECOMMENDATIONS

The investigation into generative AI integration within the WRI124 reveals a complex terrain where potential benefits intertwine with challenges. In response to the central research questions, lecturers acknowledge the advantages of generative AI; however, they express concerns about potential misuse, highlighting the necessity for a balanced integration of traditional and technological approaches with a focus on responsible generative AI use. Students initially express scepticism; however, they hold hopeful anticipation for generative AI support, contingent on effective guidance. Markers express cautious considerations about potential shortcuts; consequently, they recognise generative AI as a significant tool for teaching and learning when used purposefully. They stress the importance of teaching responsible generative AI use, viewing it as an enhancer of students' writing skills when used responsibly and complementing their creativity. The findings assert the imperative of a balanced generative AI implementation to complement distance learning teaching methods. This advocates for responsible generative AI use and a user-friendly approach to address concerns raised by lecturers, students, and markers. Recommendations include comprehensive guidelines, training programs, and user-friendly interfaces, encouraging active student engagement and equipping lecturers to guide generative AI use effectively. Transparent communication about generative AI's capabilities and limitations is crucial to allay concerns, and exploring generative AI as a motivational tool could further enhance the academic writing experience. This aligns with markers' perspectives and informs future practices in the changing context of generative AI in education for improved student learning outcomes and a more interactive academic writing experience. This study contributes to rethinking academic authenticity, creativity, and the future of learning by exploring the challenges and opportunities presented by the integration of generative AI into HEIs.

DATA ACCESSIBILITY STATEMENT

All data generated or analysed during this study are included in this published article.

Ethical clearance has been obtained from the Research Ethics Committee at the University of South Africa (Ref: 90268091_CREC_CHS_2022).

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COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

K. Maphoto and K. Sevnarayan: Conceptualization; K. Sevnarayan and Z. Suliman: methodology, K. Maphoto: formal analysis, K. Sevnarayan: investigation, data curation, K. Maphoto and K. Maphoto: visualization, writing—original draft preparation, K. Maphoto; K. Sevnarayan; N. Mohale; Z. Suliman; T. Ntsopi, D. Mokoena: writing—review and editing; K. Maphoto: supervision. All authors have read and agreed to the published version of the manuscript.

AUTHOR AFFILIATIONS

Kgabo Bridget Maphoto  orcid.org/0000-0003-4861-8208
University of South Africa, South Africa

Kershnee Sevnarayan  orcid.org/0000-0002-2446-8885
University of South Africa, South Africa

Ntshimane Elphas Mohale  orcid.org/0000-0002-9609-1845
University of South Africa, South Africa

Zuleika Suliman  orcid.org/0009-0009-6038-9621
University of South Africa, South Africa

Tumelo Jacqueline Ntsopi  orcid.org/0000-0003-1024-2831
University of South Africa, South Africa

Douglas Mokoena  orcid.org/0009-0002-2685-6811
University of South Africa, South Africa

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