

AI-Enabled multilingual pedagogies in Ghanaian higher education: A conceptual analysis of emerging affordances

Joyce Senya Ama Anku¹, Prince Edem Dzakpasu² and Stella Afi Makafui Yegblemenawo³

¹*Department of Teacher Education, University of Ghana*

²*Department of Teacher Education, KNUST*

³*Department of Language and Communication Sciences, KNUST*

#Corresponding Author: janku@ug.edu.gh

 [Joyce Senya Ama Anku](#) | [Prince Edem Dzakpasu](#) | [Stella Afi Makafui Yegblemenawo](#)

 [Joyce Senya Ama Anku](#) | [Prince Edem Dzakpasu](#)

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Abstract

Higher education in Ghana operates within a complex multilingual landscape with diverse linguistic repertoires of students. Despite this linguistic reality, the English language remains the dominant medium of instruction. This monolingual approach is found to constrain students' intellectual and psychological development and limit their participation in class. The article examines the potential use of both visible and non-visible AI affordances to support multilingual instruction in Ghanaian higher institutions of learning. Drawing on affordance and translanguaging theories, the article proposes ways in which AI-driven tools can shape pedagogical practices in a linguistically diverse classroom. Further, the article argues that utilising AI's affordances is essential for transforming current monolingual classrooms into more linguistically diverse spaces where every learner's intellectual capabilities are harnessed towards an inclusive and equitable university education. Finally, the article highlights the implications of the study for policy, practice, and future research on multilingual-responsive and AI-mediated teaching and learning in African higher institutions.

Keywords: Ghana, higher education, multilingualism, non-visible AI affordances, translanguaging, visible ai affordances,

Introduction

Ghanaian higher education operates within a profound multilingual landscape. Students enter universities with diverse linguistic repertoires that include multiple Ghanaian languages, regional lingua francas, and varying levels of English proficiency. This linguistic diversity reflects broader patterns of everyday communication, cultural identity, and modes of knowledge production



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within the Ghanaian society (Agbozo & Rescue, 2020). Across the various campuses, many higher education students routinely navigate these rich multilingual realities by socialising on campus, in halls of residence, and in group discussions (Dafouz & Smit, 2022). However, within formal classrooms, English remains the dominant medium of instruction for lectures and the language of assessment. Students are, by implication, expected to switch entirely to English in such formal spaces to communicate their ideas and in solidarity with academic legitimacy. This exclusive monolingual orientation in Higher Education Institution (HEI) classrooms positions English as a gatekeeper that mediates access to knowledge, classroom participation and ultimately academic success (Bayyurt & İnal, 2025).

While proficiency in English, among other benefits, may facilitate the comprehension of complex texts (Ismajli, 2024), promote intercultural exchanges among learners (Khomysyak, 2024), and enhance students' proficiency in reading, speaking, and writing (Shakir & Jabeen, 2024), studies show that the dominance of English in HEIs produces uneven epistemic access and limits students' participation and confidence. It also challenges students' identity (Al-Kahtany & Alhamami, 2022), hinders content learning, marginalises local languages (Hurst, 2016) and perpetuates a shift from nationalist to neoliberal ideologies (Rahman & Hu, 2025). This raises important questions about the role of language in knowledge construction and in promoting equity and inclusion in Ghanaian HEIs. These concerns are closely tied to the global efforts to promote quality, inclusive and equitable education.

In recent times, generative artificial intelligence (AI) has emerged, offering opportunities for automation, integration, and differentiation in learning. AI tools are becoming more attractive as they are increasingly helping academics explain content, draft, summarise, and translate documents more quickly. It is imperative to leverage the affordances of AI tools as a potential pedagogical mediator (Das, et al., 2025). Despite the growing interest in AI in education, less attention has been paid to how such AI tools may support teaching and learning in multilingual contexts such as Ghanaian HEIs. Existing literature focuses either on how efficient AI can be or on the innovation it brings, with less attention to its implications in multilingual contexts where English is the dominant language.

This study, therefore, examines the visible and non-visible affordances of AI for supporting multilingual instruction in Ghanaian higher education. It offers a conceptual analysis of AI-enabled multilingual pedagogies in university classrooms. This position situates the paper's relevance in linguistic justice, epistemic access and digital transformation in higher education. The study is guided by the following research question: What pedagogical affordances – visible and non-visible – does AI offer in supporting multilingual instruction in English-medium higher education in Ghana, and what implications does this have on policy, practice and pedagogy?

Language, power, and knowledge in Ghanaian Higher Education

In Ghana, English is the dominant academic gatekeeping language due to its privileged status in the country. Colonialism has legitimised this position and later reinforced it through the country's language-in-education policy (Owu-Ewie, 2017). Although Ghana's language-in-

education policy has been revised a few times in the past, with shifts between promoting indigenous language and English, these changes have mainly affected learners at the basic school level rather than in higher education. The language-in-education policy in Ghanaian higher education has remained mainly monolingual, with English as the dominant language of instruction, assessment and academic communication.

The dominance of English in Ghanaian higher education has both a colonial history and global underpinnings. Historically, Ghana was colonised by Britain, like several other African countries. English has since remained the official language for government communication and international diplomacy, as well as the language of education (Trudell, 2021). In addition, English has come to be associated with academic legitimacy and intellectual authority, shaped not only by colonial history but also by the continuing influence of Anglophone higher education systems. Even though Ghana gained independence more than six decades ago, this colonial linguistic legacy continues to influence language practices, preferences and educational norms in the country.

On the global front, English has remained the language of research and scholarly publication, international collaboration, and academic exchange (Crompton, 2024; Salomone, 2022). Access to academic journals, conferences, textbooks, and academic collaborations often occurs in English, requiring some level of proficiency in English. As a result, Ghana's higher education sector is compelled to align with English to remain globally visible and academically competitive.

However, this linguistic hegemony in higher education has important implications for equity and inclusion. Studies found unequal levels of English proficiency among learners from rural, peri-urban, and elite school backgrounds (Kir, 2025). For learners with lower levels of English proficiency, active participation in class discussions may become challenging, and seeking clarification on difficult concepts could feel impossible (Lebajoa, 2025) for fear of being mocked by their course mates. These studies suggest that proficiency in any language determines who participates actively in the construction of knowledge, whose voices are heard in the classroom, and which difficulties go unnoticed. This is where AI becomes a mediator in a multilingual context.

Affordance theory: A lens for analysing AI-enabled multilingual pedagogy

Affordance theory explains the relationship between an agent (human or animal) and their environment by focusing on the possibilities for action that the environment offers. The concept is closely associated with James J. Gibson (1979), who introduced it from ecological psychology. In his view, affordances are the “action possibilities” or “offerings” that exist in relation to an individual's abilities and features of the environment (Gibson, 1979; Kaptelinin, 2014). These possibilities may exist in the environment, whether or not they are immediately noticed or understood by the user (Gaver, 1991; Scarlett & Zeilinger, 2019). Gibson also argued that perception is direct, which means people tend to perceive their environment in terms of what it allows them to do rather than simply as objects to observe or remember (Gibson, 1979; Scarlett

& Zeilinger, 2019).

Although affordance theory originated in ecological psychology, it has since been widely applied in human-computer interaction and design, with a focus on how users recognise, interpret, or miss opportunities for action in technological environments (Kaptelinin, 2014; Scarlett & Zeilinger, 2019). Affordance theory is currently being applied in research on digital technologies and user interactions. According to Scarlett and Zeilinger (2019), the theory was further expanded into the domain of design and media studies, where there is an increasing focus on the role of user perception, interpretation and expectation. When it comes to technology, this shift is useful in pointing out that what a system allows is as important as what the user believes it can allow them to use.

Gaver (1991) distinguishes between three types of affordances according to how they are perceived. They are perceptible, hidden, and false affordances. Perceptible affordances occur when there is a clear relationship between the information available to the user and the possible actions. Hidden, also known as non-visible affordances exist when an action is possible, but no visual or sensory information is immediately available, so the user must infer its possibility from prior knowledge or other signs. False affordances occur when the interface design suggests that an action is possible, even though the technology does not actually support it. This distinction is helpful because it shows that “perceptibility” can be misleading, as users may perceive an opportunity for action based on design cues, even when the underlying technology does not support it (Gaver, 1991; Baber, 2018). This theoretical development provides a useful framework for thinking about the obvious and not-so-obvious ways AI technologies might invite or inhibit action in educational settings. This article is anchored in the affordances of both visible and non-visible AI tools, as discussed in the sections that follow.

Visible affordances of AI-enabled multilingual pedagogy

The integration of AI into Ghanaian universities has made several affordances visible in teaching and learning practices. In this context, visible affordances refer to the observable educational possibilities that AI creates for learners and lecturers in instructional settings (Okonkwo, 2021). These include immediate feedback, improved access to academic knowledge, personalised learning support, increased class participation, and greater efficiency in communication and assessment. AI-powered translation systems, speech-to-text and text-to-speech applications, AI-supported writing assistants, and multimodal explanatory systems are among the tools through which these affordances become visible (Fitas, 2025; Pinzolit, 2023). Their pedagogical significance lies not only in their technical functions but also in how they expand students' access to academic content. In Ghana's multilingual higher education landscape, where English can present recurring challenges, these tools help learners express themselves more confidently and effectively (Liang, 2024). The tools commonly used to realise these visible affordances are discussed below.

AI chatbots are a good example of visible AI affordance in HEIs. Generative AI tools such as ChatGPT are fast becoming one of the main tools through which visible AI affordances are

realised in universities in Ghana. The immediate affordances which are commonly cited by existing literature are instant feedback and assistance given to both learners and lecturers, homework and study task assistance, the development of various skills, increased motivation and engagement through interactive systems, and a more personalised and comfortable learning experience (Essel, et al., 2022; Labadze, et al., 2023). Given the large class sizes lecturers have to manage, students' learning progress and understanding are negatively affected by delayed feedback (Ofosu-Ampong, 2024). By providing immediate responses to student queries, these chatbots help reduce interaction gaps caused by high student-to-lecturer ratios (Essel, et al., 2022). Studies further suggest that students in Ghanaian tertiary institutions see ChatGPT, a generative AI chatbot, as a useful tool and intend to use it in their academic work (Bonsu & Baffour-Koduah, 2023; Tabiri, et al., 2025). In sum, chatbots make it easier to see the pedagogical affordances (educational benefits) of AI through their ability to provide immediate responses, quick access to knowledge, and learner support.

Additionally, AI translation and related AI writing tools make multilingual access more visible in Ghanaian HEIs. They help improve the understanding of materials in other languages. They also help with academic writing. Tools such as Google Translate, Microsoft Translator, and DeepL help learners understand different research materials written in other languages and broaden access to global knowledge (Butakor, 2023; Ranga-Omol, et al., 2025). Also, tools such as Grammarly and QuillBot help students improve grammar, clarity and coherence in their writing and contextual appropriateness (Anani, et al., 2025; Frank, et al., 2025; Liang, 2024), leading to more efficient use of time and learning resources and enabling more personalised learning experiences (Anani, et al., 2025; Frank, et al., 2025). In multilingual settings, these visible affordances matter because they help students participate in English-dominant academic settings with greater confidence in the language and express themselves more effectively with less stress.

Further, adaptive feedback and learning systems make personalisation especially more visible by providing learners with learning pathways that match their individual progress and real-time feedback. These systems also help teachers respond to the individual needs of learners, leading to improved academic performance and greater student engagement. AI-embedded adaptive testing and learning mechanisms allow customised tests and the development of specific learning pathways, helping students learn effectively and progress at their own pace in real time (Kwakye, et al., 2025; Ntumi, 2024). These systems support self-directed learning by using learning analytics to adjust content and assessments in response to student performance (Liekum, 2025). Their pedagogical value also lies in their ability to provide diagnostic support and improve learning outcomes. Studies indicate that students who make use of AI-assisted adaptive tests show stronger retention and understanding of course materials than those who do not (Ntumi, 2024). By identifying the strengths and weaknesses of the learners, these systems make lecturer-student interactions more targeted and meaningful (Ntumi, 2024). Thus, this suggests that adaptive systems may help in bridging the performance gap among Ghanaian students from different educational backgrounds.

Furthermore, automated assessment tools make the affordances of efficiency, timely feedback and reduced workload highly visible. Tools like AI essay graders and multiple-choice question graders reduce the burden on lecturers by handling routine assessment tasks. This gives teachers more time to focus on more complex instructional work and also provide students with personalised assistance (Almegren, et al., 2025; Wang & Li, 2024). This is especially important in resource-constrained higher education institutions (Wang & Li, 2024), where manually grading large classes can be time-consuming and unsustainable. To this extent, automated assessment tools help in the planning, development, administration and scoring of assessments (Orim, et al., 2025), particularly in developing multiple-choice items, grading student responses, and analysing large datasets (Orim, et al., 2025). This process saves considerable time and effort that would otherwise be required for manual grading.

Overall, AI is reshaping pedagogical practices in Ghanaian universities through visible affordances. It improves efficiency, expands access to educational resources, provides personalised support, and encourages more engaging and responsive learning experiences (Nsoh, et al., 2023).

Non-visible affordances of AI-enabled multilingual pedagogy

Aside from the observable affordances of AI in education, there are also less obvious possibilities for action that operate beneath the surface in its use. These are what Gaver (1991) describes as hidden affordances. Hidden affordances are real opportunities for action, but they are not immediately perceptible at the point of use. They often become clearer through repeated use. Despite their hidden nature, they can significantly but quietly shape teaching and learning.

In the Ghanaian tertiary context, these may include quieter opportunities such as practising without pressure, revising work in smaller portions or stages and engaging more freely with academic language. These opportunities help build learner confidence, reduce language-related anxiety, affirm linguistic identity, and expand epistemic access within academic spaces. Emerging research suggests that AI tools can create supportive, low-risk environments for multilingual learners, offering opportunities for rehearsal, drafting, and experimentation without the fear of negative evaluation. Such conditions have been shown to ease the anxiety commonly associated with speaking or writing in an additional language, particularly in formal academic settings (Ding & Yusof, 2025; Huang & Liu, 2025; Liang, 2024).

Beyond affective outcomes, these hidden affordances may also produce important educational effects. When AI systems accommodate indigenous languages through translation, adaptive feedback, or flexible modes of interaction, they implicitly recognise students' multilingual repertoires as assets rather than deficiencies. This recognition can validate learners' linguistic identities and strengthen their sense of inclusion within the university community. In doing so, AI helps expand epistemic access by ensuring that limitations in English proficiency do not become barriers to knowledge engagement or production. As such, hidden AI affordances play a critical role in reshaping who can participate meaningfully in academic discourse and how knowledge is constructed within multilingual higher education contexts (Fitas, 2025; Godwin-

Jones, 2024).

This perspective becomes clearer when AI is approached as a sociotechnical system rather than a neutral tool. AI systems should be understood as sociotechnical systems because they are autonomous, interactive, and adaptive, as they can learn from their environment and adapt accordingly (Hasselbalch, 2021, 2022; Kudina & Van de Poel, 2024). In other words, AI does not function in isolation; it operates within broader systems that include technologies, human agents, institutions and social arrangements. Similarly, Ndaka, et al. (2024) present AI as more than a technology and as a sociotechnical assemblage comprising politics, interests and virtual substructures that are tied to physical infrastructures and human entities elsewhere, suggesting that AI is shaped by human values and by political and social norms while also influencing those norms in return. In multilingual higher educational settings, this means AI tools may appear to offer translation, drafting or feedback at a functional level. However, their pedagogical value can extend beyond these immediate uses.

Contextual constraints on AI use

Although AI creates new opportunities for language and multilingual pedagogies in HEIs in Ghana, these affordances may not be equally available to all users. One important constraint is algorithmic bias. Although these biases may not be intentionally designed into AI systems, they, nonetheless, significantly affect educational equity and outcomes. The challenge is that since AI systems learn from real-world data, they risk being fed data already skewed by existing biases. As a result, they do not simply reproduce these biases but reinforce unfair advantages and disadvantages based on race, gender, or wealth (Boateng & Boateng, 2025).

In the Ghanaian context, AI technology can increase difficulties faced by historically marginalised students when algorithmic biases combine with other factors, such as income, digital literacy and language background (Gaskins, 2022). This is especially important in a diverse context like Ghana, where students come from different socio-economic and linguistic backgrounds, and where unequal levels of digital literacy exist.

AI can also reinforce linguistic hierarchies, especially through Large Language Models (LLMs). Studies indicate that, because many of these systems are trained primarily on dominant-language datasets, they tend to privilege dominant languages over less dominant ones, possibly creating epistemic injustice. (Devi, 2023; Dlamini & Ndzinisa, 2025). For example, AI tools perform better in English but poorly in African languages, which are underrepresented in existing state-of-the-art Natural Language Processing systems (Alabi, et al., 2025). This makes linguistic hierarchy a constraint which influences the choice of whose language practice is recognised, supported and accepted in AI-mediated learning.

Translanguaging theory in higher education

In recent times, the theory of translanguaging has gained prominence in higher education. This high interest is in response to the monolingual and language-segregated pedagogies in linguistically diverse learning environments. Rooted in sociolinguistic and educational research,

the theory conceptualises multilingual speakers' language practices not as the alternation between separate, bounded languages but as the strategic deployment of an integrated linguistic repertoire for meaning-making, learning, and identity construction (Santoso, 2020). In higher education spaces like Ghana, where English serves as the dominant academic language, translanguaging provides the opportunity to rethink how knowledge is accessed and negotiated. Importantly, the affordances of translanguaging may have pedagogical, identity-affirming or ideological underpinnings (Hodgson, 2023).

As a pedagogical practice, the theory legitimises students' use of their full linguistic repertoires to engage with academic content (Xie, 2023). In higher education classrooms, this may involve students drawing on multiple languages to understand complex concepts, participate in class discussions, process reading materials or produce written works. Instead of positioning indigenous languages as obstacles to academic advancement, translanguaging reframes them as cognitive and intellectual resources that deepen understanding and critical engagement. Translanguaging could be considered in both written and spoken modes. However, comparatively, the spoken mode has more pragmatic flexibility, which is underpinned by the interpersonal context of classroom situations (Prilutskaya, 2020). Consequently, it appears more natural for students to engage in translanguaging in the spoken mode than in the written mode.

From an ideological stance, translanguaging challenges assumptions that legitimise English as the language of academic learning (Rajendram & Tian, 2025). In place, it re-centres multilingualism as a driving force behind intellectual capabilities. These also affect translanguaging as an identity-affirming process, enabling learners to see their linguistic backgrounds as assets rather than deficits.

As mentioned earlier, the current state of higher education classrooms in Ghana and across the African continent is diversely multilingual. However, learners are expected to operate within a rigid English-only repertoire. A conscious observation of translanguaging practices, particularly in the spoken mode, will yield positive results in this space. It is important to note that translanguaging does not call for abandoning English as an academic language; rather, it advocates flexible and inclusive practices that leverage multilingual repertoires to support equitable learning and knowledge construction.

Integrating affordances and translanguaging

When we consider translanguaging pedagogy alongside AI affordances, it introduces a powerful yet inherently ambivalent conceptual bridge for multilingual teaching in Ghanaian higher education. On the enabling side, AI-driven tools such as real-time translation systems and plurilingual writing support can expand opportunities for students to traverse linguistic boundaries with greater ease. Godwin-Jones (2024) observed that these technologies enable learners to engage in academic tasks in multiple languages, thereby redistributing agency in the learning process and reducing the cognitive load often associated with operating exclusively in English (Küçükali, 2025; Payant & Kim, 2022).

At the same time, this technological promise is not without tension. As noted earlier, many AI systems remain disproportionately calibrated toward global dominant languages, particularly English, while offering limited or inconsistent support for Ghanaian indigenous languages. In this case, instead of amplifying translanguaging practices, AI risks reproducing existing linguistic hierarchies and deepening digital inequities, further marginalising local knowledge systems (Godwin-Jones, 2025). The productive integration of AI and translanguaging, therefore, depends on a carefully negotiated relationship, one in which technology does not replace pedagogical judgement but operates as a mediating layer. When thoughtfully employed, AI can help educators and students navigate the practical complexities of multilingual classrooms, enabling cross-linguistic meaning-making in ways that were previously difficult to sustain at scale (Evmenova, et al., 2024).

Conceptualising AI affordances for multilingual instruction

The conceptual framework of AI affordances serves as the analytical centre of this study, providing a structured lens through which the pedagogical implications of technology for multilingual learning can be examined. By differentiating between visible affordances (such as functional tools that support translation, writing, or content access) and non-visible affordances that operate at a psychological or affective level, this framework captures the layered ways in which AI shapes educational experience. It allows for a more nuanced understanding of how AI mediates not only what students do but also how they feel, perceive, and position themselves within academic spaces in Ghanaian tertiary institutions.

Importantly, this perspective moves beyond reductive views of AI as a neutral productivity enhancer. Instead, AI is understood as a complex pedagogical actor whose influence extends to students' confidence, linguistic self-concept, and sense of belonging within the university community. In multilingual contexts, these non-visible dimensions are particularly consequential, as they shape how learners interpret their linguistic repertoires and negotiate academic legitimacy. Seen through this lens, AI affordances become central to reimagining inclusive pedagogical practices that recognise multilingualism not as a challenge to be managed, but as a resource to be cultivated (Evmenova, et al., 2024; Fitas, 2025)

Towards proposed AI-mediated translanguaging practices in Ghanaian Universities

A look at Ghanaian tertiary institutions shows that little attention is being paid to the affordances of translanguaging. Bearing in mind that translanguaging has increasingly emerged as a pedagogical orientation through which both students and lecturers can draw on the totality of their linguistic resources, English alongside the different Ghanaian languages, to support meaning-making and deepen understanding (Letsela, 2021; Wunseh, 2023), we offer these conceptual views to support classroom pedagogy and assessment in Ghanaian Higher institutions.

1. During instructional hours, lecturers should allow students to form mixed-ability groups based on their linguistic repertoires to hold discussions and deliberate on key issues in their indigenous languages.
2. Students, linguists and experts from computer science programmes should be encouraged to build local AI tools from scratch, which will translate a large corpus of English medium texts and instructions into several local languages. The AI tools should have an interactive component and allow students to engage using the local languages. This initiative will serve as a significant step towards building a corpus of Ghanaian languages that is both relevant to university classrooms and has strong potential to enhance the status of indigenous Ghanaian languages. The role of linguists is particularly paramount in ensuring consistency and accuracy in translations, as well as in facilitating a balanced representation of regional variations.
3. Also, experts should be tasked to build AI tools that speak multiple indigenous languages that teachers can use to reframe their instructions and students can use to ask or answer questions.
4. Computer science experts should be resourced to build special AI-enabled PowerPoint and Word documents to provide accompanying subtitles in multiple indigenous languages.
5. Important curriculum materials, such as course outlines, lecture notes, textbooks, and assessment tools, should be accompanied by embedded QR codes that students can scan for content and instructions in indigenous languages.
6. In assessment, students should be able to answer questions in their local languages while lecturers, with the help of the AI tools, scan and translate the students' responses into their preferred languages for grading.

Essentially, this proposal sees AI as a bridge to multilingual pedagogy. This proposal may seem technologically dependent, but it requires proper coordination between linguists, indigenous language experts, and tech experts. This will prevent the reproduction of English-centric materials through AI. We also envisage perceived inequalities in infrastructure development and low access to digital tools. To curb this, there must be institutional buy-in and government support for the proposed initiatives.

Implications for teaching, curriculum design and assessment practices

Adopting AI-mediated multilingual pedagogy in HEIs will undoubtedly have several implications, particularly for teaching, curriculum design, and assessment. In teaching, it is crucial to prioritise AI-mediated pedagogies through both visible and non-visible affordances over traditional pedagogical practices that enforce English-only participation. Lecturers must practice linguistically responsive teaching by creating an enabling classroom environment that uses appropriate AI tools to harness multilingual repertoires. Additionally, there is a need to integrate AI tools that support translation and summarisation, among other skills, as scaffolding

mechanisms. Again, lecturers must deliberately design collaborative tasks that engage students in multilingual discussions. Students must also be encouraged to draft and discuss their ideas using AI tools before presenting them in English. In a nutshell, AI ought to be used as a mediating layer to encourage all students' participation in class.

Further, introducing AI-mediated multilingual pedagogies requires restructuring of the existing curriculum in universities. This will necessitate a shift from the current monolingual, English-dominated knowledge transmission and assessment practices to the incorporation of multimodal and multilingual learning resources, thereby encouraging flexibility in course design and in other curriculum materials, such as lecture notes and reading lists. Lecturers must deliberately integrate AI-enabled tools, such as multilingual glossaries and QR-linked translations, into their syllabi. This will enable students to access and engage with the curriculum content more easily.

Finally, for AI-enabled multilingual pedagogies to be impactful, assessment tasks ought to be designed to embrace multilingual meaning-making while simultaneously maintaining academic standards in HEIs. This calls for a shift from existing English-driven, product-oriented, individualised assessment practices to AI-supported, process-driven feedback mechanisms. For instance, since the inception of AI, some HEIs, even in Ghana, have banned the use of AI in assessment and research. Such institutional policies and guidelines tend to overgeneralise the use of AI by focusing on its visible affordances, such as generating content. In doing so, they overlook the non-visible affordances within the multilingual context, such as the use of AI as a linguistic bridge to translate and refine complex conceptual frameworks initially formulated in indigenous languages like Akan or Ewe into the formal academic register required for theses (Matthew, 2025; Nyamekye, et al., 2026). We argue that integrating AI-enabled multilingual tools into assessment and research practices in African universities could play a critical role in advancing the development, documentation and preservation of indigenous languages and culture.

Conclusion

In this study, we examined the use of both visible and non-visible affordances of AI to promote multilingualism in African universities. Notwithstanding their limitations, these AI affordances offer significant potential to support multilingual and inclusive pedagogical practices in higher education. Given that universities are microcosms of the broader multilingual societies in which they are situated, we further argue that the benefits of multilingualism should be embraced to advance knowledge production and cultivate 'glocal' (both global and local) citizens, rather than being perceived as a limitation on academic progress.

This article's contribution in harnessing the affordances of both visible and non-visible AI tools further enriches the debate on how technological advancement can positively extend efforts to transform university classrooms into linguistically diverse, safe spaces for both African scholars and students. Additionally, it deepens understanding and the applicability of translanguaging in university classrooms by using the affordances of AI to automate its

operationalisations. Finally, turning university classrooms into multilingually safe spaces may not happen at the snap of a finger. However, it will require gradual but robust and sustained efforts from key stakeholders, including government agencies, university management, lecturers, students, parents, and the developers of AI tools, to address the current monolingual limitations in pedagogical and assessment practices in Ghanaian and African higher institutions of learning. As a recommendation for future research, we propose that empirical studies should be conducted to examine the applicability of these conceptualisations across diverse HEIs in Africa and across disciplinary contexts.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used Scispace to search for missing references and Grammarly to improve readability and language. After using these tools, we again reviewed and edited the content as needed and take full responsibility for the content of the publication.

Author biographies

Dr **Joyce Senya Ama Anku** is a senior lecturer in Educational Linguistics and ELT at the University of Ghana. Her research explores language education, teacher identity, gender, materials development, and inclusive pedagogy in African contexts. She examines how language policy and sociocultural dynamics shape equity, literacy development, and teacher preparation within contemporary educational reforms. 

Dr **Prince Edem Dzakpasu** is a lecturer at KNUST's Department of Teacher Education, with over two decades of experience across all educational levels. He holds a PhD in Educational Technology and specialises in ICT integration, instructional design, digital innovation, and technology-enhanced learning. He advocates for gender equity and inclusive learning environments. 

Dr **Stella Afi Makafui Yegblemenawo** is a Senior Lecturer at KNUST, Ghana, with a PhD in French. She specialises in French for Specific Purposes and pedagogy. Her research explores ecolinguistics, linguistic diversity, sustainable language education, GESI, ecoliteracy, intercultural competence, and policies protecting minority language communities through language, culture and environment. 

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