

Artificial Intelligence for Inclusive Education: A Game Changer or Window Dresser?

Ben de Souza

<https://orcid.org/0000-0002-6746-9511>
Rhodes University, South Africa
ben.souza@ru.ac.za

Sisonke Mawonga

<https://orcid.org/0000-0002-8620-0948>
Rhodes University, South Africa
s.mawonga@ru.ac.za

Abstract

Since the generative Artificial Intelligence (AI) became publicly available in 2022, attention has centred on its potential for inclusion in education. However, how AI has already started to revolutionise and might further transform inclusive education remains largely speculative. This prompts a crucial question: Is AI a genuine game changer or merely window dressing? Some window dressing can be deceptive. Once inside the shop, you realise that nothing is worth your time or falls within your budget. This is similar to the current hype surrounding AI for inclusive education. The study employed the window dressing metaphor, underpinned by Pinar's *currere* theory, to explore AI's opportunities and challenges for inclusivity. Methodologically, the study involved a narrative review of the global literature focused on the conceptualisation of AI and disability inclusion in education, with implications for South Africa. Both empirical and conceptual studies indicate that generative AI is seen as a potential game changer. However, a critical analysis of these studies revealed they have not sufficiently engaged with or clearly defined how AI might redefine teaching and learning processes in inclusive settings. The article argues that AI will only be a true game changer for inclusivity if its conceptualisation is linked to the mediation processes essential to inclusive education. Therefore, this article presents a situated strategy that generative AI can use to facilitate learning for students with inclusive educational needs. This strategy could genuinely make AI a game changer, and it should be integrated with ongoing efforts to mainstream Information and Communication Technology in education.

Keywords: curriculum theory; generative Artificial Intelligence; inclusive education; narrative literature review; South Africa

Introduction

Generative Artificial Intelligence (AI), which rapidly entered the public sphere in 2022, has become one of the most discussed topics in educational discourse, including debates about disability inclusion. Much of this conversation portrays AI as a cure-all, with barriers to learning seemingly disappearing. However, inclusive education remains caught between policy aspirations and classroom realities (Done and Andrews 2020; Hardy and Woodcock 2024). Despite the growing enthusiasm for generative AI's potential to enhance inclusion for learners with disabilities, such claims in South Africa remain largely speculative, driven more by narrative than grounded practice. There is limited evidence of AI mediating actual pedagogical processes for learners with inclusive educational needs. Many existing studies conflate AI with earlier Information and Communication Technology (ICT) efforts without critically examining the foundational conditions (such as connectivity, assistive device provision and teacher training) necessary for AI to function effectively. As such, a critical paradox emerges: AI is widely proclaimed a “game changer” in discourse, but, ontologically and epistemologically, this designation lacks clear pathways for inclusive education.

This study uses the metaphor of window dressing to explore these dynamics. When you pass a shop window, you see carefully arranged merchandise that attracts your attention. Some window dressing can be misleading, with signs like “50% off sale” that turn out to be nothing worthwhile or affordable. Using Pinar’s *currere* theory, the study argues that unless research and practice explicitly connect AI design and deployment to mediation processes in inclusive teaching and mainstream implementation within ongoing ICT integration, AI is more likely to serve as window dressing rather than a genuine game changer. In this regard, the study investigates whether AI genuinely represents a breakthrough or simply a glittering façade in the context of inclusive education, particularly in the South African education landscape, the authors’ research setting. A key observation in this study is that the potential of AI for inclusive education in South Africa depends on technological innovation and its alignment with mediation processes such as teacher practice, assistive devices, connectivity, and pedagogical models. This situation entails that if AI is understood as part of a mediated, contextually grounded and ethically driven ecosystem, it can go beyond being mere window dressing and become a true game changer. This has implications for curriculum design, teacher education, institutional planning, and policymaking as this study demonstrates.

Literature Overview

Although generative AI only entered public consciousness in 2022, it has been evolving for several decades, with research on adaptive tutoring systems, automated feedback, speech recognition and computer vision dating back over 30 years (Cross and Feldman 2025). Nevertheless, the introduction of widely accessible tools, such as conversational agents like ChatGPT, has brought AI into focused debate with renewed urgency. Cross and Feldman (2025) note that while AI is not new, its ubiquity and accessibility impose

unprecedented demands on educators and policymakers to grapple with opportunities and risks. Ethical concerns, privacy, equity, and bias related to marginalised learners have already been expressed in South African discourses on digital inclusion (see Morris 2020). In South Africa, the rationale of inclusive education traces back to the post-apartheid imperative to dismantle segregation and ensure equitable access for learners with disabilities. Grounded in the Salamanca Statement and concretised in Education White Paper 6 (Department of Education 2001), policy envisaged that all learners, regardless of factors such as disability, should participate fully in mainstream public schools with appropriate support (Engelbrecht and Muthukrishna 2019).

Despite strong inclusive education policy frameworks, implementation has faltered globally (Walton 2025) and, worse still, in developing countries in Southern Africa (de Souza, Kaunda, and Potgieter 2024). For example, Masuku, Mathe and Sithole's (2021) research showed that in the South African context, many teachers retain medical-model perspectives in inclusive education for learners with disabilities. Motitswe (2025) reported on a study that found teachers' reluctance in the North West Province was linked to limited training and inadequate support structures. This situation confirmed that the gap between policy and practice remains substantial as classroom overcrowding, limited resources, inadequate training and persistent exclusion continue to hinder learners with disabilities from meaningful inclusion (Motitswe 2025). Similarly, Malahlela and Johnson (2024) conducted a study on teachers' application of inclusive education policy. The study observed that, although there was a theoretical understanding, self-efficacy remained low, and actual inclusive pedagogy was rare in practice. Zongozzi and Ngubane (2025) highlighted how institutional policies, infrastructure, staff capacity, and curriculum design largely failed to provide equitable digital access for learners with disabilities. These structural and pedagogical challenges underline the reality that inclusion, even within the digital domain, is far from realised. It is therefore necessary to review the research on AI and its connections to inclusive education worldwide, in general, and in South Africa in particular.

Theoretical Framework

Generative AI in educational discourse, especially regarding inclusive education, requires both a technical or policy perspective and a profound philosophical and curricular examination. The issue, as outlined in this study, is not whether AI can generate audio for the deaf or visual cues for the blind. Instead, the question is whether and how AI redefines what it means to teach, to learn and to belong within an inclusive classroom. To critically explore this issue, the study draws on William F. Pinar's reconceptualist curriculum theory, particularly his 2019 expansion of *currere*, to frame the ontological and epistemological questions behind AI's promising surface. Central to Pinar's curriculum theory is a strong opposition to viewing curriculum as merely content delivery. Rather, Pinar (2019a; 2019b) advocates for curriculum as a complex dialogue between a teacher and a learner, between the self and society, between the past and the future, and between the local and the global. He situates curriculum in

subjectivity and experience, particularly in the lived curriculum, rather than in the official syllabus. His seminal method of *currere* (from Latin, “to run the course”) sees curriculum as an autobiographical and existential process where teachers and learners reflect on their past (regressive), analyse the present (progressive), envision possible futures (prospective), and then return to the present with greater insight (synthetic).

For Pinar, curriculum is not merely what is taught but what is lived. It is inherently political, historical, and ethical. It cannot be divorced from context, memory, or emotion. More importantly, it cannot be reduced to a “technology of delivery.” This is where its power lies in addressing the critical question posed by this study: Is AI in inclusive education a game changer or simply window dressing? When applied to a South African context, Pinar’s theory offers a counterbalance to the technicist narratives surrounding education in the age of AI. Scholars such as Fataar (2020) and Le Grange (2018) have noted that educational discourse in South Africa mostly adopts instrumentalist framings of the curriculum. The discourse focuses on skills to be delivered to bodies for economic benefit. Pinar argues that what truly matters is the learner’s inner life, the teacher’s humanity and the social imagination. In this study, Pinar’s curriculum theory provides a perspective to move beyond superficial alignments of AI with inclusive education. As the literature overview has shown, AI is depicted as a neutral and technical addition, a “thing” that can magically convert text into speech, sound into text and make knowledge universally accessible. This perspective treats inclusivity as a software challenge to be solved rather than a pedagogical relationship to be nurtured.

Research Methodology

This study was qualitative in design. It employed a narrative literature review methodology. While a scoping review primarily aims to map the extent of existing scholarship and identify knowledge gaps in emerging fields (Campbell et al. 2023), a narrative literature review, although flexible in its methodology, facilitates a deeper, more critical and interpretive engagement with research (Pautasso 2019). It is not merely an exercise in cataloguing existing knowledge but a mode of argumentation and narrative construction. Choosing to conduct a narrative literature review reflects the need to scrutinise not only what research on AI and inclusive education claims but also how such claims are framed, theorised, and contextualised within South Africa’s unique educational landscape. A narrative literature review in this context is not purely descriptive but argumentative. It places studies in dialogue, highlights tensions and contradictions, and investigates the ontological and epistemological assumptions underlying discussions of AI and inclusivity. It aims to tell a story of how AI has been conceptualised globally and what this signifies for inclusive education in South Africa. This methodological stance speaks to Pinar’s concept of curriculum as a “complicated conversation” rather than a fixed body of knowledge. The narrative literature review itself becomes part of this conversation. It questions whether AI truly mediates inclusive pedagogy or merely acts as a technological disguise that maintains existing exclusions.

The review was organised around a central research question: How does research conceptualise generative AI for inclusive education, and how do these conceptualisations address disability inclusion in contexts such as South Africa? Unlike a scoping review, which systematically collects almost all available sources, this narrative literature review adopted a purposive and interpretive approach. The goal was not exhaustiveness but depth. Priority was given to English-written peer-reviewed studies published between 2022 and 2025. This timeline coincided with the surge of discourse around generative AI following the release of ChatGPT and related tools. Systematic reviews, conceptual papers and empirical studies that directly address inclusive education and disability were included in the selection. Significantly, literature with perspectives from the Global South, decolonial critiques or implications for South Africa's infrastructural and pedagogical realities was emphasised. This approach recognised that knowledge production and representation is not neutral. The narrative literature review allowed for highlighting silences and omissions that a purely systematic method might overlook.

To enhance transparency and reproducibility, a multi-stage search and screening process was followed. First, database searches were conducted between February and September 2025 across Scopus, Web of Science, SpringerLink, Taylor & Francis Online, Wiley Online Library, and Google Scholar. The following search strings were used, adapted for each database using Boolean operators:

- “Artificial Intelligence” AND “Inclusive Education”
- “AI” AND “Disability Inclusion”
- “Generative AI” AND (“Special Needs” OR “Learners with Disabilities”)
- “Educational Technology” AND “Disability” AND “AI”
- “Universal Design for Learning” AND “Artificial Intelligence”

Searches were limited to 2022–2025 to align with the period when generative AI became widely available. Reference list snowballing (Wohlin et al. 2022) was also utilised to identify relevant secondary sources. The initial search returned 312 records. After removing duplicates ($n = 94$), 218 titles and abstracts were screened using predefined inclusion and exclusion criteria. Inclusion criteria were: (1) explicit focus on inclusive education or disability inclusion; (2) discussion of AI or generative AI within educational contexts; (3) publication in peer-reviewed journals; and (4) publication from 2022 onwards. Exclusion criteria were: (1) studies on AI unrelated to disability or inclusion; (2) non-educational applications of AI; (3) grey literature, opinion pieces or non-peer-reviewed reports; and (4) studies focusing solely on general ICT or 4IR technologies without engagement with AI. Following title and abstract screening, 32 studies met the initial threshold and underwent full-text review.

During full-text review, studies were further assessed based on conceptual relevance and the extent to which they addressed the mediation of AI in inclusive teaching and learning. Nineteen studies were excluded at this stage for lacking a substantive focus on disability. These studies offered only general commentary on AI or duplicate conceptual insights found in stronger papers. Thirteen studies remained and were included in the final synthesis. The rationale for selecting the 13 studies (Table 1) is therefore methodological and conceptual rather than numerical. These studies offered the most direct, rigorous, and contextually relevant engagement with AI and inclusive education within the defined period. To ensure rigour in a narrative review context, a light-touch quality appraisal was conducted. For empirical studies, criteria adapted from the Mixed Methods Appraisal Tool (MMAT) were used, focusing on clarity of research questions, coherence between the method and the findings, transparency of the analysis and relevance to inclusion. For conceptual and systematic reviews, relevance, analytical depth, and theoretical coherence were considered. While narrative reviews typically do not exclude studies solely based on quality scores, this appraisal informed how studies were weighted and interpreted in the final synthesis.

Table 1. Studies selected for analysis

#	<i>Study</i>	<i>Focus</i>
1	Chalkiadakis et al. (2024)	Systematic review of AI and virtual reality interventions designed for students with disabilities
2	Melo-López et al. (2025)	AI and personalised learning pathways in UDL
3	Papalexandratou et al. (2024)	AI's technical capacity to augment human teaching
4	Ronksley-Pavia et al. (2025)	AI and neurodiversity
5	Spulber (2024)	Bibliometric review of studies on AI in inclusive education
6	Rahim et al. (2024)	Review of empirical research on educator adoption of AI for accessibility
7	Motitswe (2025)	AI in inclusive education in South Africa
8	Malahlela and Johnson (2024)	AI in inclusive education in South Africa
9	Wen et al. (2025)	Review of empirical research on AI in virtual and augmented reality classrooms
10	Buzzi et al. (2025)	AI-assisted data storytelling for the blind and visually impaired in UDL
11	Cortés-Navarro et al. (2024)	AI-based strategies for personalisation of learning
12	Tshidi and Dewa (2024)	Coding and robotics education in South Africa
13	Dlamini and Ndzinisa (2025)	AI and decolonisation in sub-Saharan Africa

To make sense of the studies in Table 1, a thematic analysis (Clarke and Braun 2014) was employed. Instead of mechanically coding texts, the 13 studies were treated as participants in a conversation, asking: What assumptions underpin these claims? Where do tensions emerge? What is said about mediation, including teacher practice, infrastructure and pedagogy, and what is overlooked? This approach reflected the study's argumentative stance: AI cannot simply be accepted as a game changer because literature claims so. Instead, it should be critically examined through the perspectives of mediation, context and equity.

Ethically, this study relied solely on publicly available and peer-reviewed literature. As such, no formal ethical approval was required from the authors' institutional affiliation, Rhodes University. Nevertheless, ethical responsibility was exercised in two ways. First, accurate citations and representation of all selected sources were ensured. Second, a critical approach towards the narrative literature review itself was adopted. The study acknowledged that power dynamics, geography and access shape academic discourse. In doing so, it resisted the temptation to universalise findings from high-resource settings. Instead, it foregrounded the implications for South African learners with disabilities who are marginalised in both technological and educational contexts.

Results from Narrative Literature Review

This narrative literature review synthesises emerging global and South African research on AI and inclusive education. It critically engages with systematic reviews, conceptual papers, and empirical studies to examine the claim that AI enhances disability inclusion. The review employs Pinar's *currere* framework to investigate whether AI is integrated into learners' lived curriculum or remains an external technological overlay that bypasses the relational and pedagogical work of inclusion. The synthesis of the selected 13 studies (Table 1) induces the following four themes:

1. AI as an apparent game changer in inclusive education
2. The mediation gap: Why AI risks becoming window dressing
3. UDL, storytelling and the promise of situated AI
4. Equity, decoloniality, and the Global South critique

AI As an Apparent Game Changer in Inclusive Education

Systematic reviews have highlighted AI as a significant force for improving accessibility and inclusion. Chalkiadakis et al. (2024) mapped AI and virtual reality interventions designed for students with disabilities. They found strong potential in adaptive tutoring systems, speech recognition, and immersive environments. Their conclusion is clear: AI technologies can break down long-standing barriers to learning,

especially for visually and hearing-impaired students. Similarly, Melo-López et al. (2025) argued that AI promotes personalised learning pathways aligned with Universal Design for Learning (UDL), supporting a diverse range of learners who have traditionally been excluded. Central to these claims is a belief in AI's technical ability to enhance human teaching.

Papalexandratou et al. (2024) identified text-to-speech, automated feedback and intelligent tutoring systems as tools that enable learners with learning disabilities to access and process information differently from their peers. In their systematic review, they observe that many AI interventions assume cognitive overload can be reduced through AI-supported scaffolding, thereby promoting more equitable participation. Ronksley-Pavia et al. (2025) extend this optimism to generative AI, noting that tools like ChatGPT and image generators provide neurodivergent learners with support for creative expression, literacy development, and executive functioning. They caution, however, that much of this potential remains at the experimental stage, with limited classroom-based evidence. These studies portray AI as a transformative force: a set of tools capable of addressing the gaps that traditional pedagogy has left unfilled for decades. Nonetheless, their optimism warrants scrutiny. As Spulber (2024) observed in their bibliometric review, although the number of publications praising AI in inclusive education has increased, there are notable variations in research depth and focus. Most studies remain conceptual or pilot projects, with little critical analysis of systemic conditions, teacher practices or long-term equity outcomes.

The Mediation Gap: Why AI Risks Becoming Window Dressing

Despite broad consensus on AI's potential, several reviews reveal that most interventions lack meaningful integration into pedagogical and infrastructural realities. Rahim et al. (2024), for instance, examined empirical research on educator adoption of AI for accessibility. They found that while teachers acknowledge AI's potential, adoption is hindered by a lack of training, fear of obsolescence, ethical uncertainty and inadequate support systems. Without teacher buy-in and professional development, AI tools remain external add-ons rather than embedded mediators of learning. This resonates with the South African context, where inclusive education has long been undermined by inadequate teacher preparation and resources.

Studies (e.g. Motitswe 2025; Malahlela and Johnson 2024) highlighted that, even when theoretically supportive of inclusion, teachers may fail to apply inclusive pedagogy due to overcrowding, low self-efficacy and infrastructural deficits. AI does not eliminate these structural barriers. In fact, it may worsen them if introduced without proper scaffolding. The case of immersive learning environments further illustrates this mediation gap. Wen et al. (2025) reviewed empirical research on AI in virtual and augmented reality classrooms and concluded that such environments increase engagement and adaptability. But they acknowledged that immersive learning presumes access to stable internet, high-end devices, and trained educators. These conditions are

far from guaranteed in most of the South African public schools. What appears revolutionary in a high-resource setting risks becoming irrelevant or exclusionary in low-resource contexts. Here, Pinar's *currere* theory offers a sharper critique. The issue is not whether AI can provide captions or text-to-speech. The problem is whether such tools are integrated into the lived curriculum in ways that affirm learners' dignity, belonging, and subjectivity. AI may provide access to information, but access without meaningful mediation does not equate to inclusion. Pinar (2019a) argues that curriculum is a lived experience, not mere delivery. Therefore, AI as a superficial embellishment emerges precisely when it bypasses the relational and ethical work of teaching.

UDL, Storytelling, and the Promise of Situated AI

Some recent interventions show promise by placing AI in broader pedagogical frameworks. Buzzi et al. (2025) explored AI-assisted data storytelling for blind and visually impaired (BVI) students through the lens of UDL. Their project did not merely provide access to data visualisation but reimagined how storytelling, AI and UDL intersect to promote agency and literacy for BVI learners. Crucially, they conceptualised AI not as a standalone tool but as part of an inclusive curriculum design that transforms classroom interaction. Similarly, Cortés-Navarro et al. (2024) mapped AI-based strategies for personalisation of learning. They emphasised how adaptive feedback and predictive analytics can support differentiated instruction. However, they stressed that personalisation only achieves inclusion when it aligns with teacher facilitation and ethical data practices. Otherwise, personalisation risks fragmenting learners into isolated data points. This could eventually undermine the collective dimension of inclusion. These examples point to an important lesson: AI can be transformative only when situated in frameworks like UDL or used as part of narrative practices that promote human connection, hence Pinar's call: teaching as a complex conversation, not a technical fix.

Equity, Decoloniality, and the Global South Critique

An even sharper critique comes from Global South scholarship, which warns that AI's celebration may mask systemic inequalities. Tshidi and Dewa (2024) examined coding and robotics education in South Africa, noting how generative AI has the potential to promote equity but mostly reinforces inequalities due to gaps in teacher training and resource distribution. AI, in this context, risks reproducing privilege under the guise of democratisation. Dlamini and Ndzinisa (2025) extended this critique through a decolonial perspective. They argued that AI in sub-Saharan Africa is largely misaligned with local contexts, importing assumptions of equality while ignoring equity and historical marginalisation. Their analysis highlighted that AI can perpetuate epistemic injustice by privileging Western datasets, pedagogical models, and technological infrastructures. For learners with disabilities in South Africa, this raises urgent questions: whose knowledge is embedded in AI systems, and whose needs are

overlooked? This critique resonates with Le Grange's warning against the instrumentalist framing of curriculum. AI, as a technical fix, risks erasing the inner life of the learner, reducing inclusion to software compatibility rather than a fight for recognition, dignity, and belonging.

Discussion

The narrative literature review in the preceding section revealed two contradictory narratives. On the one hand, AI is celebrated as a breakthrough in inclusive education, with systematic reviews emphasising its potential for personalisation, accessibility, and learner empowerment (Chalkiadakis et al. 2024; Melo-López et al. 2025; Ronksley-Pavia et al. 2025). On the other hand, critical studies argue that these promises are speculative, disconnected from infrastructural realities, teacher mediation and considerations of fairness (Rahim et al. 2024; Spulber 2024; Tshidi and Dewa 2024; Dlamini and Ndzinisa 2025). For South Africa, the lesson is clear: AI will only be a game changer if integrated in pedagogical mediation, contextual infrastructure, and ethical frameworks that address learners' lived experiences. Otherwise, it will be window dressing, appealing in words but hollow in practice.

As noted earlier, the key issue is not whether AI can provide captions for deaf learners or descriptions for visually impaired learners. Such abilities are well documented in global literature (see Ronksley-Pavia et al. 2025; Buzzi et al. 2025). Instead, the real challenge is whether these tools can be integrated into South African classrooms in ways that uphold the dignity, recognition, and sense of belonging of learners with inclusive educational needs. Pinar's reconceptualist curriculum theory offers critical insights here. According to Pinar (2019a, 2019b), curriculum is not merely a technical script for content delivery, but a complicated conversation among teachers, learners, society, and history. Therefore, AI should not be viewed as a neutral addition that ensures inclusion simply because of its technological novelty. Its educational significance depends on whether it can be embedded into lived curriculum experiences that allow disabled learners to participate fully and meaningfully in classroom life. Access without mediated engagement, as *currere* theory argues, is not inclusion; it is merely exposure.

The narrative literature review showed that without attention to mediation processes, AI risks becoming little more than what we call "window dressing." This metaphor hits home in South Africa, where many learners with disabilities still lack access to the internet or assistive devices (Zongozzi and Ngubane 2025). When AI is presented as a revolutionary force but remains inaccessible due to infrastructural gaps, the result is not real transformation but exclusion cloaked in the language of innovation. Wen et al.'s (2025) work on immersive learning environments supports this point. They argued that technologies that seem groundbreaking in high-resource settings may be irrelevant in settings where teachers lack training, devices are scarce, and the internet is unreliable. Therefore, the excitement about AI as a game changer should be balanced with the

understanding that technological solutions cannot be separated from systemic inequalities.

At the same time, examples like Buzzi et al.'s (2025) AI-assisted storytelling for blind and visually impaired learners show how AI can go beyond its "spectacle" status when embedded within inclusive pedagogical frameworks such as UDL. These interventions demonstrate that AI's potential arises not from the tool itself, but from its integration into pedagogies that promote agency, participation, and narrative. In South Africa, this involves seeing AI not merely as a shortcut to inclusion but as part of broader efforts in teacher development, curriculum reimaging, and infrastructural support. Otherwise, as Motitswe (2025) and Malahlela and Johnson (2024) warned, teachers may support inclusion in theory but struggle to implement it in practice due to low self-efficacy, overcrowding, and insufficient support.

The review also highlights the epistemic risks of adopting AI without critical reflection in South Africa. As Dlamini and Ndzinisa (2025) noted, AI systems largely embed Western assumptions in datasets and pedagogical models, perpetuating epistemic injustice and erasing local contexts. Pinar's focus on curriculum as a lived and autobiographical engagement prompts us to question: whose experiences, languages and knowledge are legitimised in AI's outputs, and whose are marginalised? Without critical scrutiny, AI may reproduce neo-colonial hierarchies under the appearance of neutrality, thereby reinforcing rather than dismantling educational exclusion. Therefore, we propose a situated AI strategy for inclusive education as shown in Figure 1 below.

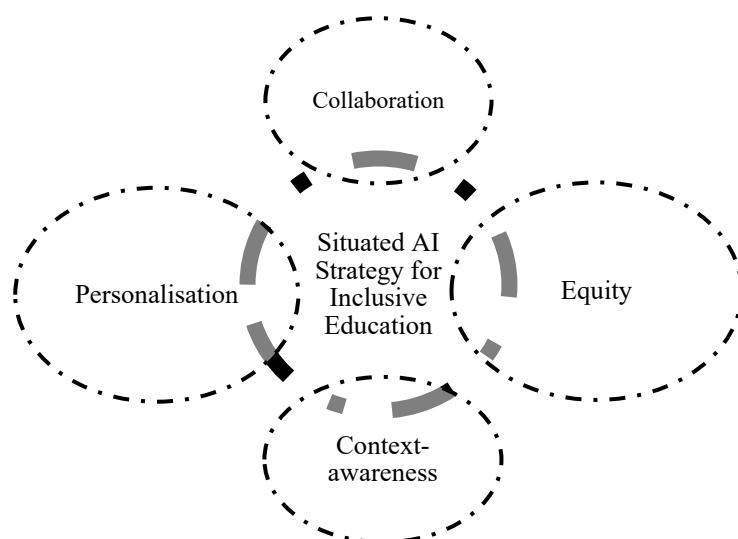


Figure 1: Situated AI strategy for inclusive education

Implications of the Situated AI Strategy for Inclusive Education

The implications of the situated AI strategy for inclusive education (Figure 1) in South Africa are significant. AI will not, by itself, close the deep gap between inclusive education policy and practice. Instead, it risks widening existing inequalities if implemented as a purely technical fix disconnected from pedagogy, infrastructure, and context. AI can only truly transform the field if it is integrated into mediated teaching practices. Otherwise, AI will remain, in Pinar's (2019a; 2019b) terms, part of a curriculum of systems rather than a curriculum of lives. Therefore, to operationalise the conceptual strategy presented in Figure 1, it is necessary to break it down into four interlinked components: pedagogical mediation, infrastructural readiness, contextual localisation and ethical-curricular reflection. The recommendations may translate each component into concrete actions for teachers, schools, policymakers, and researchers.

A central implication of this study is that the transformative potential of AI in inclusive education depends on deliberate *pedagogical mediation*. Rather than treating AI as a passive add-on, teachers need to integrate it purposefully into their instructional design. This includes crafting lesson plans that pair AI tools, such as text-to-speech generators or adaptive quizzes, with thoughtful human facilitation through reflective discussions or guided group work. In schools, ongoing professional learning communities can provide the space for teachers to experiment with AI, share insights and evaluate which tools genuinely support diverse learners. At the individual level, AI-assisted scaffolding should be incorporated into learners with disabilities' Individual Support Plans, making technology part of their personalised learning pathways.

Effective implementation also requires *infrastructural readiness*. Schools and policymakers should ensure that a minimum level of enabling infrastructure is in place, beginning with reliable internet connectivity, appropriate assistive devices, and accessible software. Simple audit tools can help identify gaps in these areas. Resource allocation should intentionally prioritise schools serving large numbers of learners with disabilities, using ring-fenced budgets to advance inclusive technologies. Importantly, implementation should occur in phases: starting with low-cost AI literacy and accessibility tools before progressing to more complex and immersive environments that require greater technical capacity.

Contextual localisation is equally essential. AI tools and practices should align with the linguistic and cultural diversity of South African classrooms. This involves selecting or developing AI systems that support local languages and encouraging the creation of datasets that reflect local contexts rather than relying solely on imported content. Teachers also need guidance on how to adapt generative AI prompts for rural, multilingual, and under-resourced settings. Collaboration with disability organisations is crucial in ensuring that AI tools and outputs represent the lived experiences of South African learners rather than reproducing assumptions embedded in external models.

Ethical-curricular reflection should underpin AI integration. Teachers should engage in reflective journaling to examine how AI reshapes classroom relationships, learner participation and identity formation. At the institutional level, schools should establish review protocols to detect and address cultural mismatches or biases in AI-generated content. Researchers, too, have an essential role in developing participatory studies that foreground the voices of learners with disabilities, allowing them to narrate how AI influences their learning journeys. These reflective practices would ensure that AI is embedded in a curriculum that remains centred on human experience and ethical responsibility.

Recommendations for Further Research

The narrative literature review in this article identified several critical gaps that require systematic and sustained empirical attention. These gaps suggest three overarching research pathways that together can advance a stronger understanding of how AI mediates inclusive education in South Africa and similar contexts.

The first pathway concerns teacher mediation. While the reviewed studies (including Chalkiadakis et al. 2024; Melo-López et al. 2025; Papalexandratou et al. 2024) highlight AI's potential, very little is known about how teachers integrate generative AI into the rhythms of everyday classroom practice, especially for learners with different categories of disability. Future research should therefore explore how teachers use AI in daily lesson routines and identify the forms of mediation that either enhance or limit AI's inclusive potential in multilingual classrooms. This line of inquiry lends itself to a methodology that captures classroom life as it unfolds. Classroom-based ethnographies could provide rich accounts of how teachers and learners interact with AI tools. Design-based research, with its iterative cycles of testing and refinement, could help develop and evaluate AI-supported teaching practices.

A second research pathway centres on the intersection of contextual inequality and infrastructure. Some studies (including those systematically reviewed in Tshidi and Dewa 2024) made clear that differences in technological access between rural and urban schools profoundly shape AI's effectiveness. Future studies should therefore investigate how infrastructural disparities influence the actual use of AI for accessible learning and which low-cost or offline AI tools are most viable in under-resourced contexts. Comparative case studies could reveal how different school environments enable or constrain AI adoption. In contrast, participatory action research with disadvantaged schools would ensure that research interventions are responsive to local needs.

The third research pathway calls for a deeper engagement with decoloniality, belonging, and the lived curriculum. Questions emerged regarding whose epistemologies are embedded in the AI tools that enter South African classrooms and how these tools shape learners' identities, experiences, and sense of belonging (Dlamini and Ndzinisa 2025). Researchers could investigate how learners with disabilities themselves experience AI

in their learning journeys, foregrounding their perspectives rather than relying solely on technological assumptions. Narrative inquiry provides a stronger methodology for capturing these lived experiences, while critical discourse analysis can help uncover the cultural and epistemic assumptions embedded in AI-generated content.

Conclusion

In this age of generative AI, inclusive education stands at a crucial moment. Generative AI can be revolutionary, but only if it is seen not as a spectacle, but as a situated pedagogical practice. As the theory of *currere* teaches us, inclusion is not achieved through display. It is achieved through engagement. The classroom is not a showroom, but a storeroom: full of contradictions, labour, care, and mess. If AI is to be more than just window dressing, it should enter that space. This article made an urgent plea to move beyond empty praise of AI towards a practical and grounded understanding of its role in inclusive education. Only then can generative AI begin to live up to its promise, not as a tool of exclusion concealed in innovation, but as a genuine mediator of equitable and transformative learning.

References

Buzzi, M., B. Leporini, A. Lo Duca, V. Punzo, and D. Rotelli. 2025. "Inclusive Data Literacy: UDL and AI-Assisted Data Storytelling for BVI Students." In *Artificial Intelligence in Education. Posters and Late Breaking Results, Workshops and Tutorials, Industry and Innovation Tracks, Practitioners, Doctoral Consortium, Blue Sky, and WideAIED. AIED 2025. Communications in Computer and Information Science*, vol 2592, edited by A. I. Cristea, E. Walker, Y. Lu, O. C. Santos, and S. Isotani. Cham: Springer. https://doi.org/10.1007/978-3-031-99267-4_6

Campbell, F., A. C. Tricco, Z. Munn, D. Pollock, A. Saran, A. Sutton, and H. Khalil. 2023. "Mapping Reviews, Scoping Reviews, and Evidence and Gap Maps (EGMs): The Same but Different—The 'Big Picture' Review Family." *Systematic Reviews* 12 (1): a45. <https://doi.org/10.1186/s13643-023-02178-5>

Chalkiadakis, A., A. Seremetaki, A. Kanellou, M. Kallishi, A. Morfopoulou, M. Moraitaki, and S. Mastrokoukou. 2024. "Impact of Artificial Intelligence and Virtual Reality on Educational Inclusion: A Systematic Review of Technologies Supporting Students with Disabilities." *Education Sciences* 14 (11): a1223. <https://doi.org/10.3390/educsci14111223>

Clarke, V., and V. Braun. 2014. "Thematic Analysis." In *Encyclopedia of Critical Psychology*, edited by T. Teo, 1947–52. New York: Springer. https://doi.org/10.1007/978-1-4614-5583-7_311

Cortés-Navarro, D. A., S. A. Álvarez-Calvo, B. Cuesta-Quintero, and D. Rico-Bautista. 2024. "Educational Strategies and Tools Based on AI: A Systematic Mapping for the Personalization of Learning." In *Advances in Computing. CCC 2024. Communications in Computer and Information Science*, vol 2209, edited by N. D. Duque-Méndez, L. A. Aristizábal-Quintero, M. Orozco-Alzate, and J. Aguilar, 91–105. Cham: Springer. https://doi.org/10.1007/978-3-031-75236-0_8

Cross, S., and J. Feldman. 2025. "Artificial Intelligence in Education: Considerations for South African Schooling." *Journal of Education* 98: 27–41. <https://doi.org/10.17159/2520-9868/i98a02>

de Souza, B., B. Kaunda, and L. Potgieter. 2024. "Inclusive Education in Southern Africa: A Critical Policy Analysis." *Journal of Educational Studies* 23 (3): 55–76. <https://doi.org/10.59915/jes.2024.23.3.4>

Department of Education. 2001. *White Paper 6: Special Needs Education—Building an Inclusive Education and Training System*. Pretoria, Government Printer. Accessed December 11, 2025, https://www.gov.za/sites/default/files/gcis_document/201409/educ61.pdf

Dlamini, R., and N. Ndzinisa. 2025. "Towards a Critical Discourse on Artificial Intelligence and Its Misalignment in Sub-Saharan Africa: Through an Equality, Equity, and Decoloniality Lens." *Journal of Education* 98: 42–61.
<https://doi.org/10.17159/2520-9868/i98a03>

Done, E. J., and M. J. Andrews. 2020. "How Inclusion Became Exclusion: Policy, Teachers and Inclusive Education." *Journal of Education Policy* 35 (4): 447–64.
<https://doi.org/10.1080/02680939.2018.1552763>

Engelbrecht, P., and N. Muthukrishna. 2019. "Inclusive Education as a Localised Project in Complex Contexts: A South African Case Study." *Southern African Review of Education* 25 (1): 107–24. Accessed December 11, 2025,
<https://www.saches.co.za/dmdocuments/SARE-Vol25-Issue1-Aug2019.pdf>

Fataar, A. 2020. "The Emergence of an Education Policy Dispositif in South Africa: An Analysis of Educational Discourses Associated with the Fourth Industrial Revolution." *Journal of Education* 80: 5–24.
<https://doi.org/10.17159/2520-9868/i80a01>

Hardy, I., and S. Woodcock. 2024. "Inclusive Education Policies—Objects of Observance, Omission, and Obfuscation: Ten Years On." *International Journal of Inclusive Education* 28 (13): 3234–3252. <https://doi.org/10.1080/13603116.2023.2257697>

Le Grange, L. 2018. "Decolonising, Africanising, Indigenising, and Internationalising Curriculum Studies: Opportunities to (Re)Imagine the Field." *Journal of Education* 74: 4–18. <https://doi.org/10.17159/2520-9868/i74a01>

Malahlela, M. K., and E. Johnson. 2024. "South African Teachers' Application of Inclusive Education Policies and Their Impact on Learners with Learning Disabilities: Implications for Teacher Education." *Education Sciences* 14 (7): a743.
<https://doi.org/10.3390/educsci14070743>

Masuku, M. M., V. C. Mathe, and M. S. Sithole. 2021. "Restoring Inclusive Education: Paradigm Shift from a Medical to a Social Model among Learners with Disability." *Journal of Sociology and Social Anthropology* 12(3–4): 97–105.
<https://doi.org/10.31901/24566764.2021/12.3-4.370>

Melo-López, V. A., A. Basantes-Andrade, C. B. Gudiño-Mejía, and E. Hernández-Martínez. 2025. "The Impact of Artificial Intelligence on Inclusive Education: A Systematic Review." *Education Sciences* 15 (5): a539. <https://doi.org/10.3390/educsci15050539>

Morris, M. R. 2020. "Viewpoint: AI and Accessibility—A Discussion of Ethical Considerations." *Communications of the ACM* 63 (6): 35–37.
<https://doi.org/10.1145/3356727>

Motitswe, J. M. 2025. "Teachers' Perceptions on Including Learners with Barriers to Learning in South African Inclusive Education System." *African Journal of Disability* 14: a1543. <https://doi.org/10.4102/ajod.v14i0.1543>

Papalexandratou, P., A. Stathopoulou, and C. Skanavis. 2024. "The Use of Artificial Intelligence in the Education of Students with Learning Disabilities: A Systematic Review." *Global Journal of Engineering and Technology Advances* 21 (3): 33–49. <https://doi.org/10.30574/gjeta.2024.21.3.0223>

Pautasso, M. 2019. "The Structure and Conduct of a Narrative Literature Review." In *A Guide to the Scientific Career: Virtues, Communication, Research and Academic Writing*, edited by M. Shoja, A. Arynchyna, M. Loukas, A. V. D'Antoni, S. M. Buerger, M. Karl, R. Shane Tubbs, 299–310. Hoboken, NJ: Wiley. <https://doi.org/10.1002/9781118907283.ch31>

Pham, M. T., A. Rajić, J. D. Greig, J. M. Sargeant, A. Papadopoulos, and S. A. McEwen. 2014. "A Scoping Review of Scoping Reviews: Advancing the Approach and Enhancing the Consistency." *Research Synthesis Methods* 5 (4): 371–85. <https://doi.org/10.1002/jrsm.1123>

Pinar, W. F. 2019a. *What Is Curriculum Theory?* 3rd ed. New York, NY: Routledge. <https://doi.org/10.4324/9781315625683>

Pinar, W. F. 2019b. "Currere." In *Key Concepts in Curriculum Studies: Perspectives on the Fundamentals*, edited by J. Wearing, M. Ingersoll, C. DeLuca, B. Bolden, H. Ogden, T. M. Christou, 50–52. New York, NY: Routledge. <https://doi.org/10.4324/9781351167086>

Rahim, N. H. S. M., A. Luqman, and C. C. Li. 2024. "AI for Accessibility in Education: A Systematic Review of Empirical Research on Educators' Adoption Factors." In *Conference e-Proceedings: International Conference on Business and Social Sustainability*, 109–114. Kelatan, Malaysia, Universiti Teknologi MARA.

Ronksley-Pavia, M., L. Nguyen, E. Wheeley, J. Rose, M. M. Neumann, C. Bigum, and D. L. Neumann. 2025. "A Scoping Literature Review of Generative Artificial Intelligence for Supporting Neurodivergent School Students." *Computers and Education: Artificial Intelligence* 9: a100437. <https://doi.org/10.1016/j.caai.2025.100437>

Spulber, D. 2024. "AI in Inclusive Education: Differences in Research Trends." *Geopolitical, Social Security and Freedom Journal* 7 (1): 85–99. <https://doi.org/10.2478/gssfj-2024-0007>

Tshidi, M., and A. Dewa. 2024. "The Promise and Peril of Coding & Robotics Education in South Africa: A Scoping Review of Teacher Preparation and Generative Artificial Intelligence's Potential for Delivering Equity." *Journal of Education* 96: 140–64. <https://doi.org/10.17159/2520-9868/i96a08>

Walton, E. 2025. "Why Inclusive Education Falters: A Bernsteinian Analysis." *International Journal of Inclusive Education* 29 (4): 570–584. <https://doi.org/10.1080/13603116.2023.2241045>

Wen, Y., Z. Wang, and X. Guo. 2025. "Trends and Applications of AI in Immersive Learning Environments: A Systematic Review of Empirical Research." *Interactive Learning Environments*, 1–19. <https://doi.org/10.1080/10494820.2025.2524029>

Wohlin, C., M. Kalinowski, K. R. Felizardo, and E. Mendes. 2022. "Successful Combination of Database Search and Snowballing for Identification of Primary Studies in Systematic Literature Studies." *Information and Software Technology* 147: a106908. <https://doi.org/10.1016/j.infsof.2022.106908>

Zongozzi, J. N., and S. A. Ngubane. 2025. "Equitable Access to Digital Higher Education for Students with Disabilities in South Africa." *African Journal of Disability* 14: a1525. <https://doi.org/10.4102/ajod.v14i0.1525>