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Understanding Neurodiversity in South African Classrooms: Emerging Practices and Persistent Gaps

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ABSTRACT:

This article examines how neurodiversity is understood and supported in South African classrooms. The concept of neurodiversity encourages educators to recognise cognitive differences as part of human variation rather than as deficits. Although South Africa has made progress in inclusive education policy, the practical support required for neurodiverse learners remains uneven across schools. The study synthesises recent literature and secondary data to explore how teachers experience neurodiversity, the kinds of support available, and the systemic barriers that influence daily classroom practices. A qualitative document analysis was used to review policy documents, national reports, and recent scholarly publications without involving human participants. The findings indicate that teachers often feel underprepared to accommodate neurodiverse learners and rely heavily on personal initiative. Limited specialist support, inconsistent training, and unequal access to resources also affect implementation. Despite these challenges, schools that adopt collaborative practices such as peer support structures and differentiated teaching show promising results. The article argues that a deeper understanding of neurodiversity can strengthen inclusive education and help the sector respond more effectively to learner diversity. The discussion highlights implications for teacher development, policy refinement, and future research.

Keywords: Neurodiversity; Inclusive education; South Africa; Teacher training; Learning support

INTRODUCTION AND BACKGROUND

Neurodiversity has emerged as a significant lens for understanding cognitive and learning differences within contemporary education systems. It offers a conceptual shift from traditional deficit-oriented views to an appreciation of neurological variation as a natural and valuable aspect of human diversity. In this sense, neurodiversity recognises that learners experience, process, and express information in different ways, and that these differences should inform how teaching, assessment, and support strategies are designed. This perspective is particularly relevant in South Africa, where classrooms reflect wide-ranging social, linguistic, and developmental diversity, often intensified by structural inequalities. The country's commitment to inclusive education, articulated through Education White Paper 6, set out a vision for enabling all learners to participate meaningfully in schooling. Despite this policy direction, recent reports show that many schools continue to face deep challenges in implementing inclusive practices in ways that fully support neurodiverse learners (Department of Basic Education, 2021). Current scholarship indicates that although inclusive education has been widely accepted as a guiding principle, its operationalisation has been uneven. Walton and Engelbrecht (2023) observe that progress has been slower than anticipated due largely to limited teacher preparation, shortages in specialist personnel, and uneven allocation of resources across provinces. These challenges are particularly pronounced in under-resourced schools, where teachers face large class sizes, constrained access to learning support materials, and limited opportunities for professional development. Neurodiversity provides an important opportunity to strengthen inclusive education because it moves beyond categorical diagnoses and instead focuses on supporting learners according to their functional needs. However, the practical interpretation of neurodiversity within South African classrooms remains insufficiently documented

Several recent studies emphasise that teachers often experience uncertainty about how to identify and support neurodiverse learners, especially when formal screening and assessment services are limited (Diedricks & Swart, 2022). Consequently, teachers may rely on informal strategies, personal experience, or peer advice rather than evidence-based approaches. This situation creates significant variability in how learners are supported, with some receiving appropriate accommodations while others remain marginalised. At the same time, educational psychologists and learning support practitioners note that neurodiversity aligns well with the inclusive education agenda because it encourages flexible teaching approaches, differentiated instruction, and the creation of learning environments that reduce cognitive overload and stigma (Maringe & Moletsane, 2023). These insights highlight the need to consolidate knowledge on how neurodiversity is conceptualised and applied in practice, particularly within the constraints of the South African schooling context. The background to this study is grounded in the recognition that while international literature has expanded significantly on neurodiversity, South African research is developing more slowly. National policy documents acknowledge the need for inclusive, learner-centred teaching but offer limited guidance on how neurodiversity should inform everyday pedagogical decisions. This gap raises important concerns about the capacity of teachers and

school systems to create effective learning pathways for students with diverse cognitive profiles. As South Africa continues to pursue equity and inclusion in education, understanding how neurodiversity is integrated into scholarship, policy, and practice becomes essential.

The objective of this study is to explore how neurodiversity is defined and represented in recent South African academic literature, policy frameworks, and institutional reports. The article also examines the practical support mechanisms available to neurodiverse learners, with a particular focus on teacher experiences. Three research questions guide the investigation:

- 1. How is neurodiversity conceptualised in South African education literature?
- 2. What practices and support mechanisms currently exist for neurodiverse learners?
- 3. What systemic challenges limit effective implementation?

By addressing these questions, the study contributes to a clearer understanding of the opportunities and constraints shaping neurodiversity-informed inclusion in South African schools

LITERATURE REVIEW

Introduction

The body of research on neurodiversity has grown steadily over the past decade, yet its application within African and particularly South African educational contexts remains comparatively underdeveloped. Most local scholarship continues to focus on inclusive education in general or on individual conditions such as autism, dyslexia, or ADHD, rather than on the broader paradigm of neurodiversity as a framework for understanding learner differences. This gap is significant because neurodiversity provides a conceptual shift from traditional deficit-based approaches toward recognising cognitive variation as a natural aspect of human diversity. As South Africa deepens its commitment to inclusive education, evident through policy reforms and growing scholarly engagement, there is a pressing need to critically examine how neurodiversity is conceptualised, operationalised, and experienced in classrooms. This literature review synthesises recent empirical studies, theoretical contributions, and policy analyses published within the last five years. It highlights progress made, challenges encountered, and the conceptual and practical gaps that continue to shape neurodiversity discourse in South African education. In doing so, it establishes the scholarly foundation for the present study, which aims to deepen understanding of neurodiversity within national teaching and learning environments.

Conceptualizing Neurodiversity in the South African Context

Neurodiversity as a paradigm reframes neurological differences, such as autism spectrum disorder (ASD), ADHD, dyslexia, and other neurodevelopmental variations, not as deficits or pathologies to be "fixed," but as natural, valuable variations in human cognition (Nthontho & Naidoo, 2025). In South Africa, this perspective is gaining traction, but the literature remains relatively nascent, with only a handful of empirical studies directly addressing neurodiversity in educational contexts (Ndou-Chikwena & Sefotho, 2025; Dyosini, 2025; Patilima, 2025). This emerging scholarship underscores a conceptual shift away from strictly diagnostic frameworks to one that recognizes difference, dignity, and systemic support. Nthontho and Naidoo (2025), in their integrative review of policy and academic texts from 2020-2025, propose an inclusive framework based on the United Nations' principles of availability, accessibility, acceptability, and adaptability. They argue that despite strong legal backing in South Africa for inclusive education, practical gaps remain: insufficient data on neurodivergent learners, inconsistent definitions, limited involvement of neurodivergent voices, and scarce specialised resources (Nthontho & Naidoo, 2025). Their work underscores the need to reconceptualise policy, not only to accommodate but to celebrate cognitive diversity, and to embed neurodiversity meaningfully into national educational rights frameworks. Complementing this conceptual work, Ndou-Chikwena and Sefotho (2025) explore stakeholders' perspectives, teachers, therapists, educational psychologists, and learners, on including neurodiverse learners in mainstream curricula. Their study across South African and Zimbabwean schools reveals that policy and practices remain entrenched in medical and social models of disability, often sidelining the neurodiversity paradigm. They highlight that curricula tend to assume a "normal" neurological development, marginalising those with developmental language disorders (DLD) and other less visible neurodevelopmental differences (Ndou-Chikwena & Sefotho, 2025). These authors call for reimagining curricula through a neurodiversity lens, giving learners with differences a voice, and forming more flexible, responsive educational systems. Together, these studies demonstrate a conceptual reorientation: neurodiversity in South Africa is increasingly framed as a matter of justice and rights, rather than pathology or remediation.

Teacher Knowledge, Training, and Professional Development

A recurring theme in the literature is the insufficient training and preparation of teachers to support neurodiverse learners. Dyosini (2025), working with early childhood educators across six urban primary schools in South Africa, found that while teachers expressed genuine willingness to support neurodiverse children, they lacked the professional development needed to do so effectively. Specifically, teachers identified gaps in understanding neurodivergent conditions, in applying inclusive pedagogies, and in collaborating with families and specialists (Dyosini, 2025). They called for structured training programmes that offer both theoretical grounding and practical strategies, such as differentiated instruction, sensory-sensitive classrooms, and collaborative relationships with therapists and parents. Patilima (2025) further expands this gap by examining the intersection of neurodiversity and trauma in early childhood. Using a secondary qualitative design, Patilima draws attention to the compounded vulnerabilities faced by neurodivergent children who have also experienced trauma. The study argues that teachers must be equipped not only with neurodiversity literacy but also trauma-informed pedagogical tools, for instance, social-emotional learning (SEL), predictable routines, sensory adaptations, and restorative practices. Without such training, classrooms may inadvertently retraumatise children, particularly in low-resource environments (Patilima, 2025). These findings align with

broader calls for systemic support. Nthontho and Naidoo (2025) emphasise that teacher training alone is not sufficient: professional development for neurodiversity needs to be embedded within policy frameworks, with funding, curriculum adaptation, and resources allocated in ways that respect teachers' time and workloads.

Neurodevelopmental Conditions, Identification, and Support

Much of the early neurodiversity-related research in South Africa has focused on particular neurodevelopmental conditions, especially autism and specific learning disorders. Although not all of these studies use a strict neurodiversity frame, they offer valuable insight into how neurodivergent conditions are currently understood and supported in classrooms. For example, Altin, Geertsema, le Roux, and Graham (2023) investigate the knowledge, needs, and perspectives of South African professionals working with children who have developmental dyslexia (a specific learning disorder). Their mixed-methods study reveals persistent myths and misunderstandings among teachers, therapists, and psychologists about dyslexia. Some professionals still conflate dyslexia with low intelligence, while others are uncertain about assessment and intervention strategies. The authors argue for comprehensive, contextually grounded professional development, and for strengthening interdisciplinary collaboration to improve diagnosis, support, and instructional design (Altin et al., 2023). In the domain of autism, Nthibeli, Griffiths, and Bekker (2025) contribute a conceptual policy analysis, arguing that South African education policy continues to marginalise neurodivergent learners by conflating neurodiversity with disability and relying on deficit-based language. Their policy critique is grounded in intersectionality theory and highlights how race, class, and systemic inequality exacerbate exclusion for neurodivergent learners. They call for a reframing of policy to recognise neurodiversity as difference rather than deficit, and for inclusive policy reform to better reflect the lived realities of learners with autism and ADHD (Nthibeli et al., 2025). Empirical research in this area also explores pedagogical interventions. In a study published in the African Journal of Disability, Nthibeli, Griffiths, and Bekker (2022) examine teaching strategies for learners with autism in inclusive classrooms. They report that teachers find success in structured routines, visual supports, peer-mediated activities, and differentiated pacing. However, systemic constraints, including high class sizes, lack of specialist support, and limited curricular flexibility, pose serious obstacles to widespread implementation (Nthibeli et al., 2022). Notably, while these accommodations align with the spirit of neurodiversity, the authors themselves do not always frame them explicitly in neurodiversity terms. Beyond formal diagnoses, there is evidence that basic identification and support structures remain weak, especially in rural and under-resourced settings. The Council for Persons with Disabilities and other advocacy groups note that access to psychoeducational assessments is uneven, with long waitlists and limited capacity in many provinces (Nthontho & Naidoo, 2025). In addition, a lack of data on neurodivergent learners in mainstream schools means that governments and schools may not fully appreciate the scale or diversity of neurodevelopmental variation in the system (Nthontho & Naidoo, 2025).

Systemic and Policy-Level Barriers

Although South Africa's inclusive education policy framework (notably, SIAS – Screening, Identification, Assessment and Support) makes provision for learners with barriers to learning, the neurodiversity paradigm remains underrepresented in policy discourse and implementation (De Villiers & Barnard, 2022; Nthontho & Naidoo, 2025). De Villiers and Barnard (2022) explored Grade 1 teachers' experiences supporting learners with ADHD in mainstream classrooms under SIAS. Their findings reveal that while teachers are aware of the policy, many feel underprepared to apply it meaningfully: large class sizes, lack of time, and few resources hinder the provision of differentiated support. The standard SIAS processes often emphasise categorical diagnosis and remediation rather than embracing diversity in cognition (De Villiers & Barnard, 2022). Moreover, Nthontho and Naidoo (2025) highlight that policy texts often use inconsistent terminology, terms like "learning disability," "special needs," and "barriers to learning" are used interchangeably, diluting the specific needs of neurodivergent learners. This lack of clarity can lead to confusion in implementation, where neurodiversity-informed practices are not systematically embedded. They argue for a rights-based policy recalibration that centers the voices of neurodivergent learners themselves and aligns with international human rights principles of inclusion. The work of Nthibeli, Griffiths, and Bekker (2025) strengthens this critique, pointing out that policy often fails to account for intersectional factors: race, socio-economic status, and geographic location combine to shape how neurodivergent learners experience (or fail to experience) inclusive education. These authors call for a cultural model of neurodiversity and intersectional policymaking, rather than a "one-size-fits-all" disability model. Beyond policy texts, practical constraints hamper implementation. Patilima (2025) argues that resource scarcity, lack of assistive technology, limited access to mental health professionals, and crowded classrooms, constitutes a critical barrier to trauma-informed, neurodiversity-sensitive teaching. While policies like SIAS mandate support, they often do not translate into earmarked funding for neurodiversity-related professional development or material adaptation.

Community, Family, and Learner Perspectives

A growing body of research centers the voices of neurodivergent learners and their families in South Africa, highlighting both the promise and the gaps in current inclusive efforts. Ndou-Chikwena and Sefotho's (2025) study foregrounds students with developmental language disorders and other neurodevelopmental differences, as well as educational psychologists, remedial therapists, and teachers. Their findings emphasize that, despite formal inclusion in policy, mainstream curricula often do not reflect the lived experiences of neurodivergent learners. Participants reported that curriculum content, assessment practices, and classroom norms are not sufficiently flexible to accommodate neurological differences (Ndou-Chikwena & Sefotho, 2025). Crucially, the study calls for learner participation in curricular design, suggesting that neurodivergent students should be co-creators of the learning environments in which they participate. Similarly, Patilima's (2025) exploration of neurodiversity and trauma highlights how families and communities influence how inclusion plays out in practice. Employing a comparative analysis of global reports and South African policy documents, Patilima argues that many neurodivergent children in low-resource settings face compounded adversity. Poverty, trauma, and stigma can intersect with cognitive difference to produce heightened exclusion. The author underscores the importance of community-driven interventions, including family-educator partnerships, peer support systems, and culturally responsive trauma-informed approaches. On the institutional side, the Centre for Neurodiversity at the University of Johannesburg plays a growing role in bridging gaps between policy, research, and practice (UJ Centre for Neurodiversity, n.d.). The Centre

offers teacher training, psychoeducational assessments, family support, and community engagement. Its existence reflects a growing institutional commitment in South Africa to advance neurodiversity research, advocacy, and applied interventions (UJ Centre for Neurodiversity, n.d.). Complementarily, the Mpedi Neurodiversity Studies Scholarship at UJ, launched in 2024, aims to build research capacity by supporting postgraduate students studying neurodevelopmental learning needs (University of Johannesburg, 2024). These developments signal a strengthening infrastructure for neurodiversity scholarship and capacity building in South Africa.

Trauma, Well-Being, and Neurodiversity

Patilima's (2025) work deserves special attention for integrating the dimensions of trauma and neurodiversity. In analyzing global reports (UNICEF, WHO, UNESCO) and peer-reviewed literature, the study illustrates that neurodivergent learners are disproportionately affected by trauma, exclusion, and punitive disciplinary practices. Patilima argues for trauma-informed pedagogies grounded in universal design for learning (UDL) and social-emotional learning (SEL) to support emotional regulation and reduce disciplinary exclusion (Patilima, 2025). Such approaches can foster restorative, safe classroom environments that are more conducive to learning for neurodivergent students. Importantly, Patilima critiques the traditional separation between "special needs" and "mental health" support in schools. She suggests that neurodivergent learners benefit most when trauma-informed practices and neurodiversity-informed practices are integrated, rather than siloed. For example, predictable routines, sensory supports, emotional check-ins, and restorative justice interventions can together help build trust, belonging, and self-regulation. Absent such integrated strategies, neurodivergent children who have experienced trauma may become marginalized or alienated in mainstream settings.

Gaps and Emerging Themes

Drawing together the literature, several key gaps and themes emerge:

• Limited Empirical Research on Neurodiversity as a Paradigm

While there is a growing body of research on neurodevelopmental conditions (e.g., dyslexia, ADHD, autism), relatively few empirical studies in South Africa explicitly adopt a neurodiversity framework (Dyosini, 2025; Ndou-Chikwena & Sefotho, 2025; Nthontho & Naidoo, 2025). Much of the literature still centers on diagnosis, remediation, or categorical disability, rather than difference and strength.

• Insufficient Teacher Preparation and Support

Studies consistently highlight gaps in teacher knowledge, training, and resources (Dyosini, 2025; Patilima, 2025). Early childhood educators lack confidence in identifying neurodivergent learners and in implementing inclusive pedagogies; they call for systematic, ongoing professional development that includes both theory and practice.

• Policy-Practice Disjuncture

Although South Africa has inclusive education policies (e.g., SIAS), these do not always translate into meaningful, neurodiversity-aligned practice (De Villiers & Barnard, 2022; Nthontho & Naidoo, 2025; Nthibeli et al., 2025). Terminological ambiguity, under-resourcing, and lack of participatory policy-making contribute to this gap.

• Intersectionality and Equity

There is a clear need to understand how neurodiversity intersects with race, class, geography, and trauma (Nthibeli et al., 2025; Patilima, 2025). The dominance of a medical model in policy tends to obscure these intersectional realities.

• Limited Learner and Family Voice

Few studies directly include the perspectives of neurodivergent learners themselves or their families (Ndou-Chikwena & Sefotho, 2025). Where they do, the call is for genuine participation in educational design and decision-making.

Integration of Trauma-Informed and Neurodiversity Practices

Integrating trauma-informed pedagogy with neurodiversity-aware teaching remains underexplored but critical, especially in contexts of socio-economic disadvantage (Patilima, 2025).

Opportunities and Directions for Research and Practice

Given the gaps identified, the literature suggests several promising directions:

- Development of Neurodiversity-Centered Professional Development: Invest in long-term, scaffolded teacher training that intertwines
 neurodiversity theory, inclusive pedagogy, trauma-informed practice, and collaboration with specialists and families. This would build
 capacity across early childhood to secondary schooling (Dyosini, 2025; Nthontho & Naidoo, 2025).
- Curriculum and Assessment Reform: Reframe curricula and assessments to be more flexible, using a neurodiversity lens. This includes allowing for differentiated pacing, varied modes of expression, and learner co-creation of content (Ndou-Chikwena & Sefotho, 2025).

- Policy Advocacy and Co-Design: Encourage participatory policy processes that include neurodivergent learners, their families, and communities. Policymakers should revise term usage in policy to reflect neurodiversity rather than deficit (Nthibeli et al., 2025; Nthontho & Naidoo, 2025).
- Infrastructure and Resource Equity: Advocate for equitable allocation of resources, assistive technology, assessment services, specialist support staff, to rural and under-resourced schools. Expansion of university-based centres (e.g., UJ Centre for Neurodiversity) and scholarships (e.g., Mpedi Scholarship) can help build capacity (University of Johannesburg, 2024; UJ Centre for Neurodiversity, n.d.).
- Integrated Trauma & Well-Being Programs: Design and implement integrated trauma-informed and neurodiversity-informed interventions
 in schools, particularly in contexts marked by socio-economic disadvantage (Patilima, 2025).
- Empirical Research on Neurodiversity Outcomes: Conduct longitudinal, mixed-methods research to track neurodivergent learners' academic, social, and emotional trajectories under neurodiversity-aligned interventions. Include their voices and lived experiences (Ndou-Chikwena & Sefotho, 2025).

Conclusion of the Literature Review

The recent literature on neurodiversity in South African education reflects both progress and persistent challenges. While scholarship is lagging compared to more established global discourses, contemporary work, especially since 2023, shows a growing commitment to reframing neurodivergence in terms of rights, justice, and pedagogical possibility. Key contributions from South African researchers emphasise the role of teachers, policy, and community in supporting neurodiverse learners. However, significant gaps remain: teacher training is insufficiently robust and widespread; policy often remains stuck in deficit language; resources are unevenly distributed; and the voices of neurodivergent learners and their families are underrepresented. Moreover, the intersection between neurodiversity and trauma has only just begun to be theorised and addressed in ways that respect complexity. Moving forward, research and practice must coalesce around a vision in which neurodiversity is not merely accommodated but genuinely embraced. By centering learner participation, professional development, resource equity, and integrated trauma-aware practices, South African education can make meaningful strides toward inclusive environments that honour every learner's cognitive profile.

THEORETICAL FRAMEWORK

This study applies a dual-theoretical lens, the neurodiversity paradigm and Bronfenbrenner's ecological systems theory, to analyse how cognitive diversity is conceptualised and experienced within South African educational contexts. Together, these frameworks provide a powerful means of understanding both the individual and systemic dimensions of neurodiversity in schools.

Neurodiversity Paradigm

The first theoretical lens is the neurodiversity paradigm, which reframes neurological and cognitive differences (such as autism, ADHD, dyslexia, and other neurodevelopmental profiles) not as deficiencies but as natural variations in human cognition. Rather than viewing such differences through a medical or pathology-focused lens, neurodiversity emphasises strengths, potential, and diversity (Vromen, 2023). This strengths-based model is increasingly advocated in educational research, as it supports a shift from remediation toward valuing multiple ways of thinking, learning, and interacting. In the context of South African education, recent scholarship has argued for a neurodiversity-informed policy and practice. Ndou-Chikwena and Sefotho (2025) point out that applying a neurodiversity perspective to mainstream curricula challenges deficit-oriented discourses and encourages the design of more flexible, responsive educational environments. Their work highlights how neurodiversity allows for a reconception of inclusion: not merely integrating learners who "struggle," but reshaping curricula and pedagogy to activate the strengths that neurodivergent learners bring into the classroom. Similarly, Nthibeli, Griffiths, and Bekker (2025) critique South African policy for conflating neurodiversity with disability, thereby limiting the recognition and support of neurodivergent learners. They call for an Afrocentric, intersectional reimagining of neurodiversity that addresses systemic inequities and acknowledges the lived realities of learners who have traditionally been marginalised by deficit-focused policies. In more applied terms, Dyosini (2025) explores how early childhood teachers in South Africa understand neurodiversity and what professional development they need. Her study reveals that teachers are keen to support neurodivergent children but lack the theoretical grounding and practical tools to do so, underscoring how the neurodiversity paradigm must inform not only high-level policy but daily classroom practices. Taken together, the neurodiversity paradigm in this study underpins a shift to strengths-based inclusive practices. It encourages schools to recognise the diversity of cognitive profiles, design environments that affirm different neurological ways of being, and reconfigure support to draw on learner assets rather than suppress difference.

Bronfenbrenner's Ecological Systems Theory

The second theoretical lens is Bronfenbrenner's ecological systems theory, which posits that human development is influenced by nested systems of interaction, microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Each of these layers influences the individual, shaping both opportunity and constraint (Ekanayake & Priyanath, 2025). In the context of neurodiversity, this framework helps to map how multiple environmental systems interact to shape a neurodivergent learner's experience. For instance, at the microsystem level, interactions between the child and their immediate environment, teachers, peers, family, directly influence learning outcomes. A teacher's understanding of neurodiversity and their pedagogical choices (as revealed by Dyosini, 2025) operate within this layer. The mesosystem refers to interrelationships among microsystems, such as the home–school nexus. When families and schools collaborate, they can co-create neurodiversity-sensitive routines or support strategies, strengthening the child's learning environment. Ndou-Chikwena and Sefotho (2025) emphasise that meaningful inclusion depends on such cross-system collaborations, particularly when

curricula are co-designed with stakeholders. At the exosystem level, broader institutional and policy structures, such as district education offices, resource allocation, or access to assessment services, mediate support. Nthibeli, Griffiths, and Bekker (2025) show how policy design that fails to center neurodivergent voices or recognises only a medical-deficit model can restrict meaningful inclusion. Moreover, resource scarcity (such as limited psychoeducational assessment capacity) can severely constrain the exosystem's ability to support neurodivergent learners effectively. The macrosystem encompasses culture, values, and societal attitudes. In South Africa, historical inequalities, stigma around disability, and systemic inequities converge with neurodiversity to affect how learners are perceived and supported (Nthibeli et al., 2025; Nthontho & Naidoo, 2025). The macrosystem shapes whether neurodiversity is seen as a human variation deserving of rights and recognition, or pathologised as a deficit. Finally, the chronosystem accounts for temporal change, how neurodiversity is increasingly recognised in policy and scholarship, and how shifting attitudes over time alter the learner's ecosystem. As neurodiversity becomes more a part of national discourse, its influence may reshape the other systems (e.g., curricular reform, professional development, assessment practices).

Integrating the Two Frameworks

By combining the neurodiversity paradigm with Bronfenbrenner's ecological systems theory, this study examines both the individual and systemic dimensions of cognitive diversity. The neurodiversity lens provides normative and ethical grounding, demanding that education systems value and support neurological variance. The ecological systems theory, on the other hand, maps how multi-level contexts, from classroom to societal policy, enable or impede that support. This combined framework allows the study to interrogate not only how neurodivergent learners are understood in theory, but how various layers of their environment (teachers, school, policy, society) interact to shape their real-world experiences. It makes visible the mechanisms by which educational systems either accommodate or marginalise cognitive diversity, and helps to identify leverage points (e.g., teacher professional development, policy reform, community engagement) where change can be targeted for greater inclusion.

METHODOLOGY

This study adopted a qualitative document analysis (QDA) design to investigate how neurodiversity is conceptualised in South African education, how support mechanisms are framed in existing literature, and what systemic barriers remain. QDA is well suited to studies that seek to interpret meaning from written texts and understand how issues are represented across policy, research, and professional discourse. As Bowen (2019) explains, document analysis enables systematic examination, coding, and synthesis of existing documents to generate new insights without the need for human participant involvement. Because the study relied exclusively on publicly available documents, it did not require ethical clearance, aligning with guidance from academic institutions that exempt studies without human subjects from formal ethics review.

Data Sources and Sampling Procedures

The dataset consisted of four categories of documents:

- Peer-reviewed journal articles published within the last five years;
- · National education policy documents, including legislative frameworks and implementation guidelines;
- Reports by intergovernmental organisations, with a particular focus on UNESCO and UNICEF; and
- South African education sector reviews, including departmental monitoring reports and analytical briefs.

A purposive sampling strategy was used to select documents that directly addressed inclusive education, neurodiversity, teacher preparedness, or classroom-level support systems in South Africa. Purposive sampling is suitable for qualitative document research because it allows the researcher to select materials that offer the richest and most relevant information for the topic under study (Lubbe, 2020). Inclusion criteria required that documents:

- (a) were published between 2020 and 2025;
- (b) focused on South Africa or provided globally recognised frameworks applicable to the South African context; and
- (c) engaged substantively with concepts related to neurodevelopmental diversity, inclusive education practices, or systemic barriers in schooling.

Approximately thirty documents that met these criteria were initially identified. After a screening process to ensure relevance and depth of content, fifteen were selected for detailed analysis. This sample size aligns with recommendations for qualitative document research, which emphasise depth of analysis rather than breadth (Ahmed, 2022).

Analytical Procedures

The study followed an inductive thematic analysis approach. This began with open coding, during which each selected document was read closely to identify meaningful units of information. Codes were assigned to recurring ideas, definitions, challenges, and practices related to neurodiversity. This approach allowed the data to speak for itself and supported the emergence of themes rather than imposing pre-determined categories. Following open coding, codes were grouped into broader thematic clusters. Four major themes emerged:

- Conceptualisations of neurodiversity;
- Teacher knowledge, training, and professional development;

- · School-level enabling and constraining conditions; and
- · Systemic and policy-level gaps.

These themes were refined through iterative comparison across documents, consistent with the constant comparison method described by Bengtsson (2020). The process strengthened the interpretive validity of the findings and ensured that themes reflected multiple document types rather than isolated sources.

Ensuring Trustworthiness

Trustworthiness in qualitative document analysis requires clear methodological procedures, transparency in data selection, and reflexive engagement with the texts. To strengthen credibility, the analysis triangulated across document types, academic, policy, and organisational reports, making it possible to compare how different sectors conceptualise and respond to neurodiversity. Dependability was supported by maintaining an audit trail of search terms, inclusion decisions, coding procedures, and analytic notes.

Ethical Considerations

Because the study did not involve human participants, it fell outside the scope of formal ethics review. All documents analysed were publicly accessible or published for academic and policy purposes. As noted by Ahmed (2022), qualitative document studies carry minimal ethical risk when anonymity, confidentiality, and informed consent are not applicable. Nevertheless, the analysis was conducted with care to represent authors consistently and accurately, and to avoid misinterpretation of policy intentions or scholarly arguments.

RESULTS

The qualitative document analysis produced three overarching findings that illuminate how neurodiversity is conceptualised within South African educational literature, policy frameworks, and sectoral reports. These findings relate to (1) the disjuncture between policy commitments and teacher preparedness; (2) uneven implementation of support structures across provinces; and (3) the limited explicit use of the neurodiversity paradigm in formal documentation despite pockets of promising practice in schools. Each of these findings reflects broader systemic challenges and highlights areas requiring further attention.

Policy Commitment to Inclusion versus Limited Teacher Preparedness

The first major finding concerns the contrast between South Africa's strong ideological commitment to inclusive education and the limited capacity of teachers to translate these commitments into classroom practice. Across most of the reviewed documents, inclusion is presented as a national priority, reinforced by White Paper 6, subsequent policy updates, and various Department of Basic Education (DBE) initiatives designed to transform the education system into one that accommodates all learners. The UNESCO (2023) review of inclusive education in Southern Africa commends South Africa for maintaining clear legislative and policy alignment with international inclusion norms. Similarly, the DBE's (2021) report on inclusive education stresses that the country has developed a comprehensive framework for supporting diverse learning needs. Despite these commitments, teachers consistently report low confidence in addressing the needs of neurodivergent learners. This result appeared repeatedly across academic studies, policy evaluations, and training assessments. Walton and Engelbrecht (2023) argue that teacher preparation programmes remain overly theoretical, focusing on conceptual discussions rather than equipping teachers with actionable strategies for classroom-based support. Their analysis suggests that pre-service teachers often graduate without exposure to practical tools for working with learners who present with autism, ADHD, dyslexia, dysgraphia, or other neurodevelopmental profiles.

This gap is corroborated by Nel, Tlale, and Engelbrecht (2022), who found that teachers often feel overwhelmed by the expectation to cater for a wide range of learning needs in large, diverse classrooms. Their study indicates that many pre-service programmes allocate less time to practical inclusive methodologies than teachers require. Teachers also reported difficulty interpreting and applying policy guidelines in real-world contexts, especially when they lack mentoring or exposure to specialised instructional strategies. Further, the reviewed literature points to a broader pattern in which inclusion is conceptualised as an ideal rather than a set of concrete teaching practices. For instance, Dyosini (2025) notes that early childhood teachers understand inclusion conceptually but encounter significant challenges when implementing neurodiversity-sensitive activities. Many rely on personal experience or informal learning because they have not received substantive training on cognitive diversity. Teachers stated that they wanted more structured guidance on adapting materials, differentiating instruction, and collaborating with specialists.

Complementary findings emerged in studies examining provincial professional development programmes. While provinces such as Gauteng and the Western Cape offer regular training sessions, many teachers report that these workshops are brief, infrequent, and not tailored to neurodiversity specifically (DBE, 2023). As a result, professional development often reinforces general inclusive principles rather than supporting day-to-day strategies. The collective impression is that while the national landscape demonstrates strong policy engagement with inclusion, teachers remain the primary point of vulnerability. In several documents, teachers described themselves as "doing the best they can" while lacking the confidence and pedagogical toolkit to create fully inclusive classrooms. The result is a system in which inclusion exists at the level of policy rhetoric but remains inconsistently enacted in classroom environments.

Uneven Support Structures and Provincial Disparities

The second major finding relates to significant geographic and systemic disparities in the availability and functioning of support structures. The majority of reviewed documents recognise school-based support teams (SBSTs) as an essential pillar of South Africa's inclusive education model. When operating as intended, SBSTs coordinate interventions, monitor learner progress, provide classroom support, and ensure that teachers receive specialist guidance. However, the analysis shows that access to functioning SBSTs varies widely. Documents focusing on urban and relatively better-resourced school districts, particularly in Gauteng and the Western Cape, highlight that SBSTs tend to be more visible, better staffed, and more actively involved in problem-solving (UNICEF, 2022). In these contexts, schools often report successful collaboration between teachers, learning support educators, speech therapists, and psychologists. Such collaboration appears to enhance early identification of learning needs, reduce teacher isolation, and improve the consistency of intervention strategies.

By contrast, in rural provinces such as Limpopo, Eastern Cape, and parts of KwaZulu-Natal, the reviewed documents describe support structures as fragmented or absent. De Vries et al. (2022) report that many rural schools struggle to access specialist assessments, including those for autism or learning disabilities. Teachers in these contexts often rely on personal judgement or trial-and-error approaches rather than formalised assessment processes. Resource constraints, such as limited availability of learning support educators, inadequate ICT infrastructure, and high learner-to-teacher ratios, further restrict the implementation of inclusive practices. Some DBE monitoring reports (DBE, 2022) acknowledge that provincial differences in funding allocations, human resources, and management capacity contribute to inconsistent provision of support services. Rural schools often have limited access to district-based support teams (DBSTs), which are mandated to provide specialist services across districts. As a result, requests for assessments or interventions may remain pending for months, leaving teachers with little formal guidance.

A further pattern observed across the documents concerns the reliance on teachers' personal improvisation in under-resourced contexts. Several studies emphasise that teachers in township and rural schools routinely modify lessons, create their own learning materials, and depend on peer support rather than formal training (Matlala & Mampane, 2021). While these efforts demonstrate commitment and agency, they also reflect systemic inequities in the availability of institutional support. Notably, a small but growing set of studies highlights that communities with active NGOs or university partnerships tend to experience better support outcomes. For example, collaboration with university-based service-learning programmes has helped some rural schools access specialist knowledge, though such initiatives remain localised and unsustainable without state support (Nthibeli et al., 2025). Overall, the documents reveal that support structures for neurodiverse learners remain highly uneven across provinces. This inequity poses significant challenges for learners in disadvantaged contexts and undermines the broader aims of inclusion.

Limited Use of the Neurodiversity Paradigm in Policy Texts but Evidence of Promising Practices

The third finding concerns the notable absence of the neurodiversity paradigm in most formal documents. While South African policies frequently refer to inclusion, barriers to learning, and support needs, the language remains rooted in deficit-oriented frameworks. Terminology such as "learning barriers," "impairments," and "special needs" remains prevalent in policy documents, reinforcing a medicalised understanding of learning differences. The review found that scholarly literature is increasingly adopting the concept of neurodiversity, with studies by Nthibeli, Griffiths, and Bekker (2025) and Ndou-Chikwena and Sefotho (2025) explicitly calling for an Afrocentric, strengths-based reimagining of cognitive diversity in education. These authors argue that the absence of neurodiversity language in formal policy perpetuates the marginalisation of learners whose differences do not fit traditional diagnostic categories. Some provincial implementation guidelines also reflect a conceptual gap. When documents discuss autism, ADHD, or learning disabilities, they typically use diagnostic labels rather than framing diversity as a natural part of human variation. As a result, the broader implications of cognitive diversity, particularly the need for flexible curricula, universal design principles, and collaborative problem-solving cultures, remain underdeveloped.

Despite this gap in policy language, the analysis revealed pockets of promising practice, especially in schools that adopt collaborative or whole-school approaches. Studies by Walton and Engelbrecht (2023) and Nthontho and Naidoo (2025) found that schools using team-based problem-solving, coteaching, peer mentoring, and strength-focused support strategies report improved learner participation, emotional well-being, and reduced teacher stress. These schools often demonstrate a shared understanding of diversity as a resource rather than a burden. One particularly notable pattern across such schools is the emphasis on relationships. Teachers reported that when learners feel seen, valued, and supported, behaviour improves and academic engagement becomes more consistent. Some schools also use parent engagement strategies that align with ecological perspectives on education, recognising that home-school collaboration enhances support for neurodiverse learners.

Another emerging trend is the use of universal design for learning (UDL) principles in curriculum delivery. While not widespread, UDL appears in some training reports and academic studies as a practical framework for planning lessons that accommodate diverse learning preferences. However, the reviewed documents suggest that teachers require further training to implement UDL systematically. A small but important subset of documents highlights that embracing neurodiversity requires addressing societal attitudes. Nthontho and Naidoo (2025) argue that policy reform alone cannot shift negative perceptions of neurodivergent learners, especially in communities where stigma or misunderstanding remains common. Their study points to the need for public awareness campaigns and community-level engagement to transform the broader macrosystem surrounding schools.

Cross-Cutting Observations

In addition to the three primary findings, several cross-cutting insights emerged:

Documents consistently emphasise the emotional strain teachers experience when they feel unsupported. This aligns with **Dyosini's (2025)** argument that teacher well-being must be considered fundamental to successful inclusion.

The role of families is mentioned in nearly all academic studies but appears inconsistently in policy documents. Literature shows that family-school collaboration is central to effective support, yet policies rarely emphasise this relationship beyond general statements.

Assessment backlogs remain a major obstacle. Several documents report delays in psychoeducational assessments, hindering timely support for learners.

Technology is underutilised. ICT-based tools for supporting neurodiversity appear only sporadically in documents, despite global evidence of their value.

Together, these results present a comprehensive picture of a system that is ideologically aligned with inclusion but still wrestling with fragmented implementation, constrained resources, and conceptual gaps.

DISCUSSION

The findings of this study demonstrate that South Africa's commitment to inclusive education, while extensive at the policy level, has not yet resulted in a coherent or widespread understanding of neurodiversity within everyday classroom practice. This gap between policy intention and practical implementation highlights broader tensions in the education system. These tensions reflect challenges related to teacher preparedness, resource distribution, conceptual clarity, and systemic coordination, all of which influence how neurodiversity is recognised and supported in schools. The discussion that follows interprets the results through the dual theoretical lenses of the neurodiversity paradigm and Bronfenbrenner's ecological systems theory, while examining the implications for policy makers, teacher educators, and school leaders.

Understanding Neurodiversity and the Policy-Practice Divide

A central insight emerging from the analysis is the persistence of a policy-practice divide. National frameworks, including White Paper 6 and subsequent implementation guidelines, reinforce South Africa's dedication to inclusive education. They emphasise the need for equitable access, learner participation, and appropriate support systems. Yet the findings reveal that teachers often do not possess the practical skills or confidence required to enact these commitments. This observation is consistent with the conclusions of Walton and Engelbrecht (2023), who argue that many teachers understand inclusion conceptually but find its implementation difficult without structured guidance, hands-on modelling, and ongoing professional development. The divide is further complicated by the limited presence of neurodiversity-specific content in training programmes and policy documents. While inclusive education policies promote broad ideals such as access and participation, they seldom articulate what neurodiversity means for pedagogy, curriculum design, or learner engagement. As a result, teachers tend to rely on diagnostic labels and deficit-oriented framings, particularly when they lack exposure to strengths-based approaches. This trend mirrors the concerns raised by Nthibeli, Griffiths, and Bekker (2025), who note that policy frameworks frequently use medical or impairment-focused language, which fails to reflect contemporary understandings of cognitive variation.

Teacher Preparedness: Insights from the Microsystem

Through Bronfenbrenner's ecological lens, teachers operate within the microsystem, the environment that has the most immediate influence on learner experience. When teachers are ill-prepared or under-supported, the microsystem itself becomes a source of constraint rather than support. The findings indicate that many teachers in South Africa navigate classroom diversity through personal improvisation rather than formalised instructional strategies. Nel, Tlale, and Engelbrecht (2022) found that teachers often lack confidence in adapting instruction for learners with autism, ADHD, dyslexia, or dysgraphia, not because they are unwilling but because they have not been provided with sustained training opportunities. This lack of preparedness also affects teacher well-being. Dyosini (2025) notes that early childhood teachers who feel inadequately trained to recognise or support neurodiverse learners experience heightened stress, uncertainty, and frustration. Emotional strain can influence teacher attitudes, classroom climate, and overall willingness to experiment with inclusive strategies. Thus, addressing teacher preparedness is not merely a pedagogical concern—it is also a psychosocial imperative.

Uneven Provincial Support and Exosystem Influences

The findings also reveal significant variation across provinces in the availability and functionality of support structures. This unevenness aligns with Bronfenbrenner's exosystem, which includes district offices, provincial education departments, and other structures that influence the school environment indirectly. Better-resourced provinces such as Gauteng and the Western Cape tend to have more fully operational school-based support teams (SBSTs) and district-based support teams (DBSTs). These structures make it easier for teachers to access specialist assessments, collaborate with professionals, and implement intervention strategies (UNICEF, 2022). By contrast, rural provinces such as Eastern Cape, Limpopo, and parts of KwaZulu-Natal struggle with limited access to specialists and inconsistent implementation of support policies. De Vries et al. (2022) note that rural schools often face diagnostic backlogs, insufficient infrastructure, and limited multi-disciplinary support. These disparities highlight structural inequalities that extend beyond schools themselves. They reflect broader socio-economic inequities that shape the educational landscape and, consequently, the learning pathways of neurodiverse children. Understanding these disparities through the ecological framework underscores that teachers' experiences cannot be divorced from systemic conditions. A teacher in a well-resourced urban school operates within a different ecological reality than a teacher in a remote rural setting. Thus, improving support for neurodiverse learners requires not only teacher development but systemic interventions that address provincial inequities.

The Absence of Neurodiversity in the Macrosystem

Bronfenbrenner's macrosystem reflects cultural norms, societal values, and overarching policy discourses. The findings show that the neurodiversity paradigm is largely absent from South Africa's macrosystem. Policy language continues to frame cognitive differences in deficit terms, which in turn influences how schools and teachers perceive and respond to learner diversity. This absence represents a missed opportunity to shift national discourse toward a strengths-based, human-variation perspective. Recent scholarship advocates for a more explicit adoption of the neurodiversity paradigm. Nthontho and Naidoo (2025) argue that South Africa requires a rights-based, culturally grounded understanding of neurodivergence to fully realise the goals of inclusive education. Ndou-Chikwena and Sefotho (2025) similarly emphasise that conceptual clarity around neurodiversity would help dismantle stigma, challenge outdated assumptions, and promote more inclusive school cultures. Without a macrosystem shift, teachers and schools remain limited

by conceptual silos. Policies may call for inclusion, but if the underlying language reinforces medical or deficit interpretations, school-level practice will continue to mirror these framings. The ecological systems model therefore highlights a critical insight: meaningful change requires aligning policy language with contemporary understandings of neurodiversity.

Strengths-Based Approaches and Successful School Practices

Despite systemic challenges, the findings identify promising examples of good practice. Schools that use collaborative strategies, such as co-teaching, team-based problem solving, peer mentoring, or structured partnerships with support professionals, report improved learner participation and emotional well-being. Walton and Engelbrecht (2023) note that such schools often cultivate a shared understanding of diversity as a collective responsibility rather than an individual burden. These examples illustrate the power of the neurodiversity paradigm when applied in practice. Strengths-based approaches help teachers recognise that learners bring varied competencies, interests, and cognitive strengths to the classroom. They also promote creative lesson design, flexible grouping strategies, and inclusive behaviour management. Moreover, they encourage teachers to value learner differences rather than viewing them as barriers. These promising practices also reflect the importance of mesosystem interactions, particularly the connections between schools, families, and external support networks. Where schools actively involve parents and collaborate with community organisations, learners often experience more comprehensive and coherent support. Yet the findings show that family engagement varies, and that policies rarely emphasise the significant role families play. Strengthening mesosystem connections is therefore essential for building responsive support systems around neurodiverse learners.

Implications for Policy Makers

The results have several implications for policy makers. First, the absence of neurodiversity in formal policy language suggests the need for a conceptual update. Policies should move toward a framework that recognises cognitive variation as part of human diversity. Clear guidance on strengths-based approaches, universal design for learning, and multi-tiered support systems would better equip schools to implement inclusive practices. Second, structural inequities across provinces require targeted policy interventions. Provincial education departments need differentiated funding and capacity-building strategies that recognise historical inequalities and unique local challenges. Strengthening district-based support teams, improving access to specialist services, and streamlining assessment processes would help reduce geographic disparities. Finally, policy makers must consider ways to integrate neurodiversity into national teacher development frameworks. This includes updating pre-service curricula, expanding in-service training, and embedding neurodiversity principles in professional standards for teachers.

Implications for Teacher Educators

Teacher educators hold a critical role in bridging the policy–practice divide. The findings indicate that teacher training programmes require deeper integration of neurodiversity content and practical pedagogical tools. Moving beyond theoretical descriptions of inclusion, teacher educators should prioritise experiential learning opportunities, modelling of adaptive teaching strategies, and exposure to case studies involving neurodivergent learners. Dyosini (2025) highlights that teachers value training that is contextualised, iterative, and directly applicable. Teacher educators should therefore adopt training models that emphasise coaching, reflection, and ongoing professional growth. Doing so will help build teachers' confidence and competence in supporting cognitive diversity.

Implications for School Leaders

School leaders play an essential role in creating cultures that support neurodiverse learners. The findings show that successful schools tend to foster strong collaboration, shared responsibility, and distributed expertise. School leaders must therefore prioritise collaborative planning, schedule time for professional dialogue, and promote coordinated problem-solving through school-based support teams. Leaders also influence school culture. By adopting strengths-based language, encouraging inclusive attitudes, and setting expectations for universal design principles, they help shape environments where neurodiverse learners are valued members of the school community.

Integrating the Two Theoretical Lenses

When viewed through the neurodiversity paradigm, the findings highlight the need to shift educational practice from deficit-based approaches to strengths-based, learner-centred frameworks. When overlaid with Bronfenbrenner's ecological model, these findings underscore that such shifts require alignment across all levels of the education system, from classroom practice (microsystem) to policy discourse (macrosystem). The interplay of the two frameworks reveals that neurodiversity is not simply an attribute of individual learners but a construct shaped by social, cultural, institutional, and policy environments. Achieving meaningful inclusion therefore demands coordinated transformation across multiple layers of the ecology.

CONCLUSION

This article set out to examine how neurodiversity is conceptualised, understood, and operationalised within South Africa's evolving inclusive education landscape. The analysis shows that while national policy frameworks continue to express a strong commitment to inclusion, the practical application of neurodiversity principles remains uneven and underdeveloped. South Africa's education system is marked by ongoing efforts to redress historic inequalities, improve access, and respond to the diverse learning needs present in contemporary classrooms. Despite these ambitions, the integration of neurodiversity into everyday teaching practice has not yet reached the level required to ensure that all learners experience meaningful participation and appropriate support. A central insight emerging from this study is that teachers frequently operate in environments where conceptual clarity about neurodiversity is limited. Many educators rely on traditional special-needs framings that emphasise diagnosis, deficits, or remediation rather than recognising cognitive differences as part of natural human variation. This pattern reflects broader trends in the literature, where scholars observe that the

neurodiversity paradigm has not yet been fully embedded in teacher training, school culture, or curriculum design. As a result, teachers often face uncertainty when interpreting the learning profiles of neurodiverse learners, and this uncertainty can influence assessment practices, expectations, and relationships within the classroom.

Another significant conclusion is that structural and contextual factors play a decisive role in shaping the degree to which neurodiversity can be effectively supported. The findings indicate that access to resources, specialist support, and collaborative professional networks remains highly uneven across provinces and school contexts. Well-resourced schools tend to have functional School-Based Support Teams and access to educational psychologists or therapists, whereas many township and rural schools continue to rely heavily on teachers' personal initiative, improvised strategies, and limited external assistance. Such disparities deepen educational inequalities and hinder the system's ability to provide equitable support to neurodiverse learners. This echoes broader observations within inclusive education scholarship, which consistently highlight the misalignment between policy intentions and day-to-day realities in South African classrooms. The article also highlights the absence of the neurodiversity paradigm in many policy documents and teacher development materials. Although inclusive education is strongly promoted, the language used in official texts often reflects deficit-oriented perspectives rather than affirmations of diversity. This gap suggests that the conceptual foundations of inclusion require further strengthening. Without an explicit embrace of neurodiversity, teachers may continue to interpret cognitive differences primarily through medicalised or behavioural lenses, which can inadvertently marginalise learners and limit opportunities for pedagogical innovation.

Even so, the findings demonstrate that promising practices are emerging in some schools, particularly where collaborative approaches and sustained professional development are prioritised. Teachers working in supportive environments report improved confidence in responding to neurodiverse learning needs, and learners in these contexts appear to benefit from more flexible, strengths-based, and participatory classroom practices. These examples show that with the right conditions, schools can create learning spaces that value diverse ways of thinking and enable students to thrive academically and emotionally. They also illustrate how theoretical frameworks such as the neurodiversity paradigm and Bronfenbrenner's ecological systems theory can be translated into practical approaches that align with South Africa's broader commitment to social justice and equity. The implications of this study extend to several stakeholder groups. For policy makers, the findings underscore the importance of aligning inclusive education policies with contemporary understandings of neurodiversity and ensuring that these concepts are reflected in implementation guidelines, professional standards, and monitoring mechanisms. Teacher educators must consider how neurodiversity can be integrated more deeply into pre-service programmes by providing opportunities for practical engagement, reflective learning, and exposure to diverse learner profiles. Schools and district officials also have a role to play in creating enabling environments where teachers can access specialised support and engage in collaborative problem-solving.

Furthermore, the article shows that future research on neurodiversity in South Africa should move beyond broad policy reviews to focus more directly on classroom-level experiences. Detailed case studies, action research methodologies, and school-based interventions could provide valuable insights into how neurodiversity manifests in different learning contexts and how teachers adapt their practices in response. Such studies would help build a more grounded evidence base that can inform training programmes and guide policy revisions. They could also highlight the voices of learners and parents, whose perspectives remain underrepresented in existing research but are essential for a holistic understanding of inclusive practice. Overall, this article reinforces that the inclusion of neurodiverse learners is both an educational priority and an ongoing challenge within South Africa. While structural constraints and resource limitations remain significant, the potential for meaningful transformation exists. By adopting the neurodiversity paradigm more intentionally, strengthening professional development, and addressing systemic inequities, South Africa can move closer to realising its commitment to inclusive education as articulated in policy and international frameworks. Such progress would not only improve learning outcomes for neurodiverse students but also contribute to a more humane and equitable education system—one that recognises and values the full spectrum of human cognitive variation.

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