South African Journal of Childhood Education
ISSN: (Online) 2223-7682, (Print) 2223-7674

Early childhood teachers on Neurodiversity: Perspectives and professional development needs

Check for updates

Author:
Thokozane P. Dyosini[1]

Affiliation:
[1]Department of Early Childhood Education, School of Teacher Education, University of South Africa, Pretoria, South Africa

Corresponding author:
Thokozane Dyosini,
dyositp@unisa.ac.za

Dates:
Received: 18 Jan. 2025
Accepted: 09 Apr. 2025
Published: 15 July 2025

How to cite this article:
Dyosini, T.P., 2025, 'Early childhood teachers on Neurodiversity: Perspectives and professional development needs', *South African Journal of Childhood Education* 15(1), a1677. https://doi.org/10.4102/sajce.v15i1.1677

Copyright:
© 2025. The Author. Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

Read online:
Scan this QR code with your smart phone or mobile device to read online.

Background: The increasing recognition of neurodiversity in early childhood education (ECE) highlights the need for inclusive practices and targeted professional development. Teachers' ability to support neurodiverse learners is central to fostering equitable learning environments.

Aim: This research explores early childhood teachers' perspectives on neurodiversity and identifies their professional development needs to effectively address the diverse requirements of neurodiverse learners.

Setting: The research was conducted in six urban primary schools in South Africa, reflecting on a variety of socioeconomic contexts.

Methods: Using a qualitative case research approach, data were collected through semi-structured interviews conducted with six early childhood teachers. Thematic content analysis was applied to interpret the findings.

Results: Teachers expressed a strong willingness to support neurodiverse learners, but highlighted significant gaps in their training and access to resources. The research identified a need for professional development in areas such as understanding neurodiverse conditions, implementing inclusive teaching strategies and fostering collaborative partnerships with families and specialists.

Conclusion: Comprehensive professional development programmes addressing neurodiversity are critical for equipping early childhood teachers to create inclusive and supportive classroom environments.

Contribution: This research contributes to the limited research on early childhood teachers' experiences with neurodiversity, and provides insights for designing targeted professional development initiatives.

Keywords: neurodiversity; early childhood education; inclusive teaching practices; professional development; teacher perspectives.

Introduction

The concept of neurodiversity challenges traditional views of cognitive and neurological development, emphasising the value of diverse neurological profiles (Armstrong 2012). In early childhood education (ECE), where foundational skills and attitudes are developed, addressing neurodiversity is both critical and complex. Teachers play a pivotal role in recognising and supporting the unique needs of neurodiverse learners, yet their ability to do so is often limited by gaps in professional knowledge and systemic barriers (Robinson & Truscott 2013).

In South Africa, where classrooms are characterised by cultural and linguistic diversity, the need for inclusive teaching practices that accommodate neurodiverse learners is particularly pronounced (Naicker, 2023). This research seeks to explore early childhood teachers' perceptions of neurodiversity and identify their professional development needs to better support neurodiverse learners in order for them to receive quality equitable education. According to Singh and Jansen (2024:1) 'the early years of education are so riddled with challenges that it becomes impossible to redirect attention elsewhere'. This quote can be applied to the understanding and problematising of novice teachers and the disjuncture between their pre-service understanding

Note: The manuscript is a contribution to the topical collection titled 'Advancing neurodiversity in education for equity, inclusion and employability', under the expert guidance of guest editors Prof. Maximus Monaheng Sefotho and Prof. Veronica Dwarika.

of neurodiversity in the classroom with their in-service teaching experiences of neurodiversity in the classroom.

Research objectives

- To investigate early childhood teachers' understanding of neurodiversity in the classroom.
- To explore teachers' experiences in supporting neurodiverse learners.
- To identify professional development needs related to inclusive teaching practices.

Literature review

Understanding neurodiversity

Neurodiversity encompasses conditions such as autism, attention deficit hyperactivity disorder (ADHD), dyslexia and other developmental differences that reflect natural variations in human cognition (Singer 2017). Research highlights the importance of embracing neurodiversity in educational settings to promote equity and inclusion (Silberman 2015). Lollini (2018), among other experienced scholars in the field, define neurodiversity as a diverse range of atypical neurological processes that lead to maladaptive behaviours. It encompasses a broad spectrum of cognitive, linguistic and learning functions, as well as early-onset neurobiological conditions that affect an individual's ability to understand and engage in social interactions, learning and communication (Singer 2017). Neurodevelopmental disorders (NDDs) and pervasive developmental disorders (PDDs) are often characterised by heightened responses to environmental stimuli and, in many cases, by repetitive or restricted interests and activities. Atypical neurological functioning is not a single condition nor is it caused by one specific genetic, molecular or cellular factor (Lollini 2018; Singer 2017). The symptoms of neurodiversity vary widely in nature and intensity, affecting individuals across all ethnic and socioeconomic backgrounds, and at any age. The term 'neurodiversity' emerged in the late 20th century, gaining broader public attention through a 1998 article by journalist Harvey Blume, who suggested that 'neurodiversity may be every bit as crucial for the human race as biodiversity is for life in general', as cited in Lollini (2018). In 1999, Australian sociologist Judy Singer further developed and popularised the term, which she is largely credited with coining. Furthermore, Singer (2017) highlights that acting normal should not be the main identifier of the presence or absence of neurodiversity in children.

Understanding neurodiversity in the South African early childhood education classroom

There is widespread understanding of the term neurodiversity; however, for the purposes of this article, neurodiversity refers to those neurological differences which can be identified as autism, ADHD, dyslexia, and other learning and cognitive differences (Armstrong 2010). Similarly, Mirfin-Veitch, Jalota and Schmidt (2020) emphasise that:

> [*N*]eurodiversity is not a diagnosis it is a broad term used to encompass a wide range of specific, non-specific, hidden and/or undetermined diagnoses that include but may not be limited to: Learning (intellectual) and/or Developmental Disability (ID/DD); Communication Disorders (CD), autism or Autism Spectrum Disorder (ASD), Attention Deficit/Hyperactivity Disorder (ADHD); Specific Learning Disorders (SLD); Traumatic Brain Injury (TBI); and or Foetal Alcohol Syndrome Disorders (FASD). (p. 2)

In addition, neurological differences are known as natural variations of the human brain rather than deficits or disorders to be 'fixed' (Armstrong 2011). This perspective encourages us to view these differences as part of human diversity such as cultural or linguistic differences. In the South African ECE classroom, where learners come from a wide range of cultural, linguistic and socioeconomic backgrounds, the idea of neurodiversity is especially important (Donohue & Bornman 2023). Teachers face the complex task of supporting children who may not only learn in different ways because of neurodevelopmental differences but who are also shaped by multilingual environments, poverty, trauma, malnutrition, abuse, stress and limited access to ECE (Armstrong 2011; Clasquin-Johnson 2023; Donohue & Bornman 2023). These overlapping challenges can make it difficult to identify and support neurodivergent learners appropriately (Mirfin-Veitch et al. 2020). Furthermore, research conducted by Mahadew and Hlalele (2022:11) affirms that '… the United Nations SDG4, emphasises an inclusive, equitable and quality education with lifelong learning opportunities for all children irrespective of diversity'.

Recognising and embracing neurodiversity means acknowledging that every child has unique learning needs and strengths (Clasquin-Johnson 2023) For ECE teachers, this involves using inclusive teaching strategies, adapting the curriculum and creating supportive environments where all learners, regardless of neurological or cultural background, can learn for understanding and thrive. Moreover, it also requires professional development and collaboration with parents, caregivers and support professionals to ensure early identification and intervention. In the South African context, promoting neurodiversity is also a matter of educational equity (Donohue & Bornman 2023).

Challenges in supporting neurodiverse learners

Teachers encounter several challenges when supporting neurodiverse learners, many of which stem from limited professional development, inadequate resources and systemic pressures to meet standardised performance benchmarks. Studies have shown that while teachers are often aware of the varied abilities and personalities of their learners, they may lack comprehensive training in understanding and addressing neurodiversity in the classroom (Florian & Black-Hawkins 2011). This gap in knowledge is particularly problematic when teachers are tasked with supporting neurodiverse learners, who may require individualised approaches to learning and behaviour. In some cases, teachers may struggle to provide the

necessary accommodations or interventions because of a lack of specialised resources or expertise. These challenges are even more pronounced in under-resourced contexts, where access to specialist support services such as educational psychologists and speech therapists is limited (Ker & Van Gorp 2023). Furthermore, children from disadvantaged backgrounds may not receive early screening or support, meaning neurological difficulties go undetected until they significantly impact academic performance (Donohue & Bornman 2014). In addition, linguistic diversity can mask or mimic neurological challenges, and this misinterpretation can delay appropriate support or intervention (Donohue & Bornman 2014, Mirfin-Veitch et al. 2020).

In the South African context, these challenges are further amplified by factors such as large class sizes, language barriers, multi-grade classrooms and low levels of parental involvement, which can all hinder the effective identification and support of neurodiverse learners. Large class sizes make it difficult for teachers to devote the necessary time and attention to individual learners, while language barriers between teachers and learners may result in misunderstandings or missed opportunities for early identification of neurodiversity-related behaviours (Kalender & Erdem 2021). In addition, the lack of parental involvement, which can be attributed to poverty, demanding work schedules and limited awareness of neurodiversity, further compounds the issue. In some cases, neurodiversity is viewed with stigma or as a taboo subject, leading to the misconception that children with neurodiverse traits are simply slow or lazy, or crazy. This negative perception, coupled with the lack of resources and professional development, creates a significant barrier to providing neurodiverse learners with the support they need to thrive in the classroom. Furthermore, this can lead to social exclusion of learners at school where this attitude not only hinders their learning but also contradicts the values of *Ubuntu*, which emphasises the importance of community, respect and mutual care (Letseka 2016). When communities or peers shun, mock or bully children who present as different, it creates a hostile and unwelcoming environment that undermines the very principles of *Ubuntu*, where every individual's worth is valued and celebrated (Letseka 2016). Thus, both teachers and communities must work together to foster inclusive and supportive environments that truly embrace the diversity of all learners. In addition, both teachers and learners may not be accustomed to transformative teaching methods and feel comfortable with traditional approaches. This makes it challenging to introduce multimodal and diverse teaching and learning strategies and resources in the classroom to either identify, support and remediate neurodiversity in the classroom (Harrison et al. 2024).

Professional development for inclusion

Effective professional development is key to equipping teachers with the skills and knowledge needed to support neurodiverse learners. Studies suggest that targeted training in areas such as differentiated instruction, behaviour management and collaborative practices can significantly enhance teachers' capacity to create inclusive classrooms (Westwood 2018). Early childhood education teachers play a vital role in establishing the early learning experiences that lay the groundwork for future academic success. This research highlights that with the shift towards learner-centred and holistic education approaches, these teachers must continuously adapt and improve their teaching methods. In the modern era, teachers are expected to utilise a variety of techniques to enhance teaching and learning, which can only be effectively developed and practised through ongoing professional development (Dyosini 2024).

Theoretical framework

This research is grounded in Positioning Theory, which examines how individuals position themselves and are positioned by others within social interactions (Harré & Van Langenhove 1999). In the context of neurodiversity, both teachers and learners navigate their roles and identities within the classroom. Teachers must position themselves as inclusive practitioners who can adapt their strategies to meet diverse needs, while neurodiverse learners position themselves within a learning environment that may not always recognise or accommodate their unique abilities, especially in the multilingual, multicultural and diverse context of the South African schooling classroom (Dyosini 2022; Harré & Van Langenhove 1999). Positioning Theory provides a lens to understand the dynamic interplay between teachers and learners, emphasising the importance of mutual recognition and respect. By exploring how teachers position themselves in relation to neurodiverse learners, this framework sheds light on the opportunities and challenges of fostering inclusive classrooms. It also highlights the need for professional development to support teachers in adopting inclusive identities and practices, ultimately enabling neurodiverse learners to thrive (Harré & Van Langenhove 1999).

Research methods and design

Research design

A qualitative case research approach was employed to explore early childhood teachers' perspectives on neurodiversity and their professional development needs (Poni 2014).

Participants

Six early childhood teachers from six urban primary schools participated in the research. The participants were purposively selected to ensure diversity in teaching experience and educational backgrounds (Silverman 2013).

Table 1 presents the demographics of six novice teacher participants in a study exploring mentorship and induction practices with novice ECE teachers. The participants are all female African teachers who are working in primary schools in Johannesburg, South Africa. The teachers are relatively young, with ages ranging from 23 to 26 years. The participants teach in various grades within the ECE, including Grade 1, Grade 2 and Grade 3. Their years of teaching experience vary,

TABLE 1: Novice teacher participant demographics.

Participants	Grade	Age (years)	Years teaching	Gender	Race
Novice teacher A	1	24	2 years	Female	African
Novice teacher B	2	24	1 year	Female	African
Novice teacher C	3	24	2 years	Female	African
Novice teacher D	2	23	2 years	Female	African
Novice teacher E	2	24	1 year	Female	African
Novice teacher F	2	26	4 months	Female	African

Source: Dyosini, T., 2022, 'Mentorship and induction practices with novice Foundation Phase teachers: An exploratory case study with six primary schools novice teachers and leadership in Johannesburg, South Africa', p. 8, Doctoral dissertation, School of Education, Faculty of Humanities, University of the Witwatersrand

with some teachers having 1 year of experience, while others have up to 2 years in the profession. One participant, novice teacher F, has the least teaching experience, with just 4 months in the classroom. These novice teachers are part of a larger study that examines the mentorship and induction processes that support their professional growth.

Data collection

Semi-structured interviews were conducted to gather in-depth insights into teachers' experiences and perspectives (Silverman 2013). Interview questions focused on teachers' understanding of neurodiversity, their strategies for supporting neurodiverse learners and their professional development needs.

Data analysis

Thematic analysis was used to identify and interpret key patterns in the data. Following Braun and Clarke's (2006) framework, the analysis involved familiarisation with the data, generating initial codes, searching for themes, reviewing themes and defining and naming themes.

Ethical considerations

Ethical approval to conduct this research was obtained from the University of the Witwatersrand – West School of Education Research Ethics Committee (Protocol Number: 2018ECE018D).

Discussion and findings

Results

The transition from a novice teacher to an experienced professional is characterised by ongoing learning and growth. In the early stages of their careers, teachers concentrate on mastering fundamental skills such as classroom management and effective teaching techniques, often relying on mentorship and training for guidance. As they gain experience, they build confidence, refine their teaching approaches and develop a unique teaching style. The research adopted an interpretivist perspective, as it focuses on gaining an in-depth understanding of a specific context, which is essential for accurately interpreting the collected data (Nickerson 2022; Poni 2014). Over time, seasoned teachers often step into leadership roles, mentoring colleagues or contributing to broader school decisions related to teaching practices. Professional development and collaboration with peers remain crucial throughout their careers, as there is always room for learning and improvement.

The research findings emphasise the importance of teachers recognising the value of continuous professional development (CPD), particularly in understanding neurodiversity within ECE. Many teachers, because of differences in qualifications and levels of experience, may not have received formal training on neurodiversity during their initial teacher education. This highlights the need for targeted CPD to provide teachers with the knowledge and skills required to effectively support neurodiverse learners.

These issues were explored during the data analysis using an open-ended question: *What challenges do you face as a novice teacher?*

Novice teacher C shared that she is affected by:

> 'The emotional side, you become so frustrated because you don't know how to teach a concept, or you don't know where to get the resources.' (Novice teacher C)

In addition, she mentioned that she finds it hard to differentiate her lessons according to the learners' different learning abilities:

> '[*I*]t's hard for me to just teach all the children the same way, because they are not the same and I need someone who can actually help me with that. How am I supposed to help these children, the top learners, the weak learners or even the average learners?' (Novice teacher C)

Novice teacher E's response showed that communication, parents, leadership, language barriers, ADHD and expectations were also some of the challenges that she experienced. She further articulated that:

> 'The challenges would be, obviously, like within the colleagues. The communication. And then as soon as you get one thing wrong it's a big issue. And then obviously the parents aren't always happy that their kids land up in the new teacher's class, not all parents are for it. Most of them you get that positive thing that it is a new teacher, fresh ideas, new teaching methodologies, but some of them are really supportive. But some parents will come very harsh that no, they would rather have their child in a more experienced teacher's class. The colleagues that have been here for a long time, over twenty years or something, they seem to have sometimes an influence on the higher leadership and that and decisions being made. With the learners, well I had a Chinese learner in my class this year communicating with the parents was a bit of a challenge but then we would get an older sibling to come translate to Mandarin. As a teacher you can't really diagnose a child, but ADHD and, you know, concentration.' (Novice Teacher E)

Novice Teacher E's response highlights the difficulties she faces as a new teacher, particularly in managing relationships with colleagues, parents, and the challenges of identifying neurodiverse conditions such as ADHD. She expresses concern about not having the qualities or expertise required to diagnose children with conditions such as ADHD,

acknowledging that teachers do not have the training to make formal diagnoses. This is an important point, as identifying neurodiverse challenges such as ADHD is essential for providing the appropriate support and interventions for learners. However, as a novice teacher, Novice Teacher E recognises that her role is not to diagnose but to observe and report concerns that may require professional intervention. The ability to identify neurodiverse traits is critical because early identification can significantly influence the effectiveness of interventions and support for neurodiverse learners.

Moreover, Novice Teacher E emphasises the lack of experience and training that contributes to her feeling unqualified to address these challenges effectively. This underscores the importance of professional development and support in equipping teachers with the knowledge and skills needed to recognise and respond to neurodiverse learners' needs. Such professional development could include training in identifying signs of ADHD and other neurodiverse conditions, as well as providing teachers with strategies for supporting learners with these challenges. Without this training, novice teachers may feel uncertain and overwhelmed, which can impact the quality of education they provide. The ability to confidently identify and address neurodiversity is an essential aspect of teacher competence, and ongoing professional development is necessary to ensure that teachers can provide inclusive and effective education for all learners:

> 'The curriculum, because our curriculum is very tricky. CAPS is nonsensical, so obviously it needs to have that element. But more on emotional health and mental health issues because when you are a teacher, I am young, I am not someone's mom but I find myself being someone's mom in this class; being 28 kids' mom, you know. I find myself being a friend even though I just feel like my job description is to be a teacher. There should be a course, or a programme that will look at the holistic being. How do you act when you are faced with certain situations in the classroom where you have to deal with hectic issues like child abuse? I mean I had to deal with that, and it was overwhelming for me, because as much as I learned about it in varsity it was never in depth, like how do you go about it? Even the protocol, as to what you should do. So, for an example, one of my learners, the father hit her, he hit her so badly because she came home with a dirty uniform and that child has ADHD so obviously she is all over, she is forever hyper. So, the following day when she came to school, I saw that she had a mark on her face. So, I asked her what is going on with the mark and she said it was nothing. What do I do, how do I solve this issue as the teacher at school?' (Novice Teacher B)

Novice Teacher B's response highlights the overwhelming responsibility she feels as a new teacher, particularly in handling sensitive and complex issues such as child abuse and identifying neurodiverse conditions such as ADHD. She expresses concern about not having the qualities or expertise necessary to diagnose ADHD, which she sees as a significant barrier in providing the right support for her learners. In her response, she reflects on the challenges of being a teacher who must take on roles beyond simply delivering the curriculum, noting that she feels like she has to act as both a mother and a friend to her learners, in addition to fulfilling her teaching responsibilities. This dual role can be particularly demanding when dealing with emotionally charged situations, such as child abuse, which she mentions encountering firsthand. Despite having some basic knowledge from her university education, she acknowledges that her training did not adequately prepare her to handle such complex situations or provide clear guidance on protocols to follow.

This highlights the importance of professional development in equipping teachers with the skills to handle both emotional and academic challenges. Novice Teacher B emphasises the need for a course or programme that takes a holistic approach, addressing not only academic content but also the emotional and mental health needs of learners. The ability to identify and respond to neurodiverse challenges, such as ADHD, is crucial in creating a supportive classroom environment. Teachers must be able to recognise behaviours that may indicate ADHD, such as hyperactivity or difficulties with focus, and understand the appropriate steps to take to support those learners. In the case of her learner with ADHD who was abused by her father, Novice Teacher B felt unprepared to navigate the situation, demonstrating how critical it is for teachers to receive ongoing training in both emotional health and neurodiversity. Professional development programmes that address these areas would help teachers feel more confident and capable in handling sensitive issues, ensuring they can offer the necessary support for neurodiverse learners while also managing emotional and behavioural challenges in the classroom.

Teachers' understanding of neurodiversity

Participants demonstrated varying levels of understanding of neurodiversity. While most teachers were familiar with common conditions such as autism and ADHD, there was limited awareness of less-visible conditions such as sensory processing disorders. The participants mentioned that they encountered learners with different personalities and differentiated learning abilities, but they were not explicit in talking about their understanding of neurodiversity. The generalist teaching approach and large classroom sizes and numbers often make it challenging for teachers, especially novices to understand, identify and remediate neurodiversity in the classroom.

Challenges in supporting neurodiverse learners

Supporting neurodiverse learners presents several challenges, particularly when teachers lack adequate training and resources. Many teachers have reported insufficient training on neurodiversity during their pre-service education, leaving them ill-equipped to address the specific needs of neurodiverse learners (Florian & Black-Hawkins 2011). This gap in knowledge often leads to uncertainty in developing effective teaching strategies and interventions. Without proper training, teachers may struggle to identify neurodiverse traits and implement appropriate accommodations to support

these learners. In addition, limited access to resources, such as specialised teaching aids, trained support staff, and sufficient funding, further exacerbates the challenges faced by teachers. These constraints make it difficult for teachers to provide the individualised attention and support that neurodiverse learners require, ultimately affecting the quality of education these learners receive (Ker & Van Gorp 2023).

Another significant challenge reported by teachers is the management of challenging behaviours associated with neurodiverse conditions. Neurodiverse learners may exhibit behaviours that disrupt the learning environment or make it harder for teachers to engage all learners effectively. Teachers often express concerns about how to address these behaviours in ways that are both supportive and constructive (Guldberg 2010). Without the proper strategies and resources, managing these behaviours can be overwhelming, especially in large, diverse classrooms. Effective behaviour management requires an understanding of the underlying neurological differences that contribute to these behaviours, as well as the ability to tailor interventions to meet individual needs. Addressing these challenges is essential for creating inclusive and supportive learning environments where all learners can thrive.

Professional development needs

Novice teachers often require support from school leadership to address their professional development needs, particularly when it comes to understanding neurodiversity in the classroom (Osborne 2025). Once teachers have identified the need for further learning in this area, it is essential for school leadership to provide them with appropriate resources and opportunities for growth. This support could include access to specialised workshops, courses, or external experts in neurodiversity, as well as guidance on integrating neurodiverse strategies into classroom practices. School leaders can also facilitate peer collaboration, enabling novice teachers to engage in discussions with experienced colleagues who have expertise in supporting neurodiverse learners. By fostering an environment that values neurodiversity awareness, school leaders can help teachers feel confident and equipped to address the unique needs of all learners.

In addition, effective support from school leadership involves creating a culture of CPD, where teachers are encouraged to regularly assess their teaching practices and seek new knowledge. Once the professional development needs are identified, school leaders should ensure that teachers have sufficient time and space for reflection and learning. This may involve adjusting teacher schedules to accommodate training sessions or providing access to online resources and learning communities. A comprehensive approach, including mentorship from experienced teachers, can also be crucial in helping novice teachers integrate neurodiversity education into their teaching strategies. By prioritising differentiated types of support, including information and communications technology (ICT) integration in professional development, school leadership can ensure that novice teachers are better prepared to create inclusive classrooms where neurodiverse learners can thrive (Letsapa 2024).

The research participants identified the following professional development needs:

Firstly, the novice teachers need *In-depth Knowledge* which states that novice teachers need adequate practical training and theoretical education on identifying and understanding neurodiverse conditions of learners in the classroom and on the playground. Secondly, novice teachers require *Inclusive Strategies* which is related to practical guidance on implementing differentiated instruction for teaching and learning purposes with appropriate educational resources. Thirdly, they need to learn and implement *Collaboration Skills* which speaks to the importance of building effective partnerships with families, therapists and other professionals. Buy-in from parents is the most important aspect of understanding and remediating neurodiversity of children in early childhood. Lastly, novice teachers need *Emotional Support*; it is often taken for granted the emotional effects working with differentiated children will have on a teacher's mental health, well-being as well as needing to enhance and emotionally regulate through strategies for managing teacher stress and fostering resilience which is linked to better understanding the philosophy for teachers (Dyosini 2022).

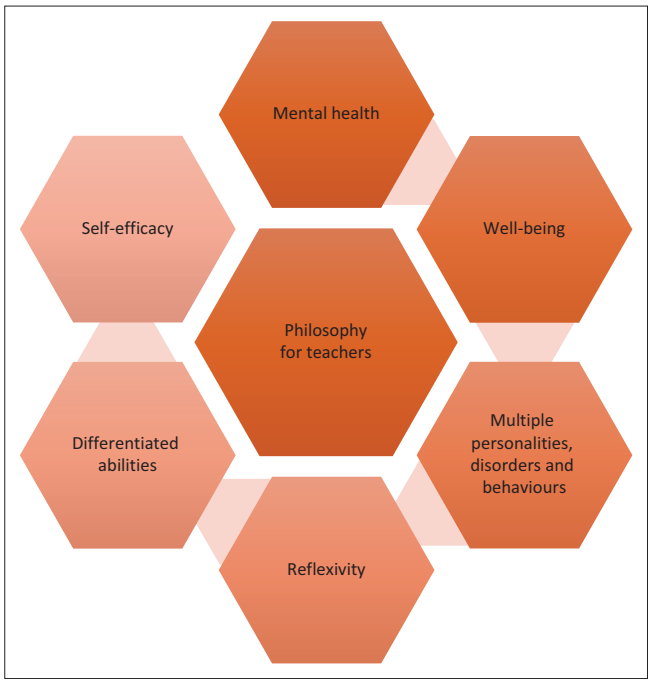
Discussion

The findings highlight a significant gap between teachers' commitment to supporting neurodiverse learners and their preparedness to do so effectively. Addressing this gap requires a systemic approach to professional development that prioritises inclusivity and collaboration.

Future research

The concept of 'philosophy for teachers', a term derived from the findings of Dyosini (2022), emerges as a key area for future investigation in teacher professional development.

Figure 1 outlines a comprehensive philosophy for teachers in ECE, emphasising the importance of understanding various aspects of child development and teacher practice. Central to this philosophy are the concepts of mental health and well-being, highlighting the need for teachers to support both their learners' and their own mental health for a positive learning environment. It also recognises the diversity of children's personalities, behaviours and developmental disorders, encouraging teachers to adopt responsive approaches. Key to this framework is the notion of self-efficacy, which underscores the importance of teachers' belief in their abilities, influencing their teaching effectiveness. Reflexivity is another vital element, urging teachers to reflect on their practices and personal growth to continuously improve. In addition, the philosophy acknowledges differentiated abilities among learners,



Source: Dyosini, T., 2022, 'Mentorship and induction practices with novice Foundation Phase teachers: An exploratory case study with six primary schools novice teachers and leadership in Johannesburg, South Africa', p. 8, Doctoral dissertation, School of Education, Faculty of Humanities, University of the Witwatersrand

FIGURE 1: Philosophy for teachers in early childhood education.

stressing the need for personalised teaching methods that cater to varying needs. Finally, a strong emphasis is placed on professional development to deepen teachers' understanding of neurodiversity, ensuring that all children, including those with neurodevelopmental differences, are supported inclusively within the ECE setting. This philosophy ultimately advocates for a holistic, inclusive and responsive approach to teaching in early childhood.

This philosophy is proposed as a transformative framework that could guide the creation of diverse, inclusive and representative professional development programmes. Such programmes would address a wide range of topics to help novice teachers assimilate more effectively into the school environment, particularly in the ECE context. The research revealed that novice teachers face significant emotional distress and challenges in their early years, often being unprepared for situations involving mental health issues, anxiety, grief and the passing away of learners. These challenges highlight the need for a professional development approach that is holistic and responsive to the complex realities of teaching, especially when it comes to addressing neurodiversity.

A philosophy for teachers would not only support the emotional and psychological well-being of teachers but also incorporate training on recognising and addressing neurodiversity in the classroom. Guided by Vygotsky's (1978) sociocultural theory, teachers should approach philosophy for teachers as a collaborative process in which they actively construct meaning through social interaction, cultural context and guided professional development support. Professional development should include mentorship, induction and coaching tailored to the needs of novice teachers, offering practical solutions to manage diverse categories of challenges, including neurodiverse behaviours and disorders. Teachers bring their own cultural and personal experiences, known as cultural capital, into the profession, making it essential to create policies and structures that reflect these realities. The findings suggest that such support should be embedded at multiple levels of teacher education – initial teacher education, school environments and within the educational departments themselves. A comprehensive philosophy for teachers, as outlined in the study, would focus on critical categories such as mental health wellness, grief, understanding multiple personalities and disorders, self-efficacy, reflexivity, progression and differentiated abilities, with a particular emphasis on neurodiversity. By integrating these elements into professional development, teachers would be better prepared to support all learners, including neurodiverse learners, fostering inclusive and supportive educational environments.

Implications for practice

School leaders should prioritise the development and implementation of effective induction, mentorship and coaching programmes with a focus on neurodiversity. This can be achieved by shifting from a top-down approach, where school leadership dictates the professional development needs, to a more bottom-up approach, where teachers are encouraged to identify and suggest areas where they need support in understanding and addressing neurodiversity in the classroom (Dyosini 2022). This shift will empower teachers to actively participate in their own professional growth, ensuring they are equipped with the knowledge and strategies necessary to support neurodiverse learners effectively (Kaiser, 2022). Incorporating teacher professional development with regard to neurodiversity into pre-service and in-service education curricula would be imperative for setting a foundation for understanding, identifying and remediating or referring neurodiverse learners in the classroom. Ensuring access to adequate, diverse and inclusive resource allocation – teaching resources and specialist support that will be effective to remediating differentiated abilities on the neurodiversity spectrum. Moreover, advocating for policies that promote inclusive education and provide funding for professional development of teachers in ECE. Early identification of neurodiversity among children in their early years will be fundamental in providing support and ensuring that they receive quality education as per the expectations and standards of Sustainable Development Goal 4 (SDG 4), which is part of the United Nations' 2030 Agenda for Sustainable Development. With its focus on quality education, it aims to ensure inclusive, equitable and quality education for all and promote lifelong learning opportunities for children in varied contexts of education in sub-Saharan Africa and globally (Daniels & Niemczyk 2022).

Conclusion

Early childhood teachers play a critical role in fostering inclusive learning environments for neurodiverse learners. However, their ability to do so is hindered by gaps in training, education, resources and systemic support. Comprehensive professional

development programmes are essential for addressing these challenges and empowering teachers to support all learners effectively. Furthermore, in order for teachers to meet the annual teaching assessment and performance goals, they need to be mindful of SDG 4 which includes targets such as improving literacy and numeracy, ensuring equal access to education and increasing the number of people with relevant skills for employment. Thus, teachers are at the cornerstone of facilitating quality education to teach and care for learners who will become contributing citizens of the world.

Acknowledgements

The author would like to acknowledge the six teacher participants who took the time to share their experiences and expertise for the success of this doctoral research. This article is partially based on the author's thesis titled 'Mentorship and induction practices with novice early childhood education teachers: An exploratory case study with six primary schools novice teachers and leadership in Johannesburg, South Africa' towards the degree of Doctor of Philosophy at the University of the Witwatersrand, South Africa in 2022, with supervisor Dr. Geeta Motilal. It is available here: https://wiredspace.wits.ac.za/server/api/core/bitstreams/8fc464c0-a85f-497a-a078-e2bf058e1636/content.

Competing interests

The author declares that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Author's contribution

T.P.D. is the sole author of this research article.

Funding information

The author reported that they received funding from the National Research Foundation (NRF), which may be affected by the research reported in the enclosed publication. The author has disclosed those interests fully and has implemented an approved plan for managing any potential conflicts arising from their involvement. The terms of these funding arrangements have been reviewed and approved by the affiliated university in accordance with its policy on objectivity in research.

Data availability

The data that support the findings of this research will be made available upon reasonable request from the corresponding author, T.P.D.

Disclaimer

The views and opinions expressed in this article are those of the author and are the product of professional research. The article does not necessarily reflect the official policy or position of any affiliated institution, funder or agency, or that of the publisher. The author is responsible for this article's results, findings and content.

References

Armstrong, T., 2010, *Neurodiversity: Discovering the extraordinary gifts of autism, ADHD, dyslexia, and other brain differences*, ReadHowYouWant.com.

Armstrong, T., 2011, *The power of neurodiversity: Unleashing the advantages of your differently wired brain (published in hardcover as Neurodiversity)*, Balance.

Armstrong, T., 2012, *The power of neurodiversity*, Da Capo Lifelong Books, New York, NY.

Braun, V. & Clarke, V., 2006, 'Using thematic analysis in psychology', *Qualitative Research in Psychology* 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Clasquin-Johnson, M., 2023, 'Framing autism', in D. Mahlo, M.G. Clasquin-Johnson & M. Clasquin-Johnson (eds.), *Autism*, pp. 6–24, Routledge, South Africa.

Daniels, C. & Niemczyk, E.K., 2022, *Strengthening sustainable development in academic activities: Focus on teacher training and professional development*, Bulgarian Comparative Education Society, Bulgaria.

Donohue, D. & Bornman, J., 2014, 'The challenges of realising inclusive education in South Africa', *South African Journal of Education* 34(2), 1–14. https://doi.org/10.15700/201412071114

Donohue, D.K. & Bornman, J., 2023, 'Twenty years later: Has inclusive education in South Africa been realised?, in *International perspectives on exclusionary pressures in education: How inclusion becomes exclusion*, pp. 205–215, Springer International Publishing, Cham.

Dyosini, T., 2022, 'Mentorship and induction practices with novice Early Childhood Education teachers: An exploratory case study with six primary schools novice teachers and leadership in Johannesburg, South Africa', Unpublished doctoral dissertation, University of Witwatersrand.

Dyosini, T.P., 2024, 'Professional development of teachers: Perceptions and challenges of Foundation Phase teachers', *South African Journal of Childhood Education* 14(1), 1572. https://doi.org/10.4102/sajce.v14i1.1572

Florian, L. & Black-Hawkins, K., 2011, 'Exploring inclusive pedagogy', *Cambridge Journal of Education* 41(2), 181–198.

Guldberg, K., 2010, 'Educating children on the autism spectrum: Preconditions for inclusion and notions of 'best autism practice'in the early years', *British Journal of Special Education* 37(4), 168–174.

Harré, R. & Van Langenhove, L., 1999, *Positioning theory*, Blackwell, Oxford.

Harrison, M., Rowlings, J., White, E. H., Vallence, M. & Potemkin, N., 2024, Neurodiversity and digital inclusion: creating the conditions for inclusive education through universal design for learning.

Kaiser, M.R., 2022, *ClassDojo as a Neurodiversity-Friendly, Adaptable Learning Management System*, KOTESOL Proceedings 2022, p. 339. Korea.

Kalender, B. & Erdem, E., 2021, 'Challenges faced by classroom teachers in multigrade classrooms: A case study', *Journal of Pedagogical Research* 5(4), 76–91. https://doi.org/10.33902/JPR.2021473490

Ker, G. & Van Gorp, R., 2023, 'Embracing neurodiversity: Supporting learners to success', in *Contemporary research topics*, p. 36, Otago Polytechnic Press.

Letsapa, M., 2024, *Grade 1 teachers' knowledge and use of Information and Communication Technology in selected North-West former Model-C schools,* Masters Dissertation, University of the Free State.

Letseka, M.M., 2016, 'The Nexus between Open Distance Learning (ODL), African Philosophy and Ubuntu', in M. Letseka (ed.), *Open distance learning (ODL)*, p. 31, Nova Science Publishers, Inc, New York, NY.

Lollini, A., 2018, 'Brain equality: Legal implications of neurodiversity in a comparative perspective', *NYU Journal of International Law and Politics* 51, 69.

Mahadew, A. & Hlalele, D.J., 2022, 'Understanding inclusion in early childhood care and education: A participatory action learning and action research study', *South African Journal of Childhood Education* 12(1), 1073. https://doi.org/10.4102/sajce.v12i1.1073

Mirfin-Veitch, B., Jalota, N. & Schmidt, L., 2020, *Responding to neurodiversity in the education context: An integrative literature review*, p. 56, Donald Beasley Institute, New Zealand.

Naicker, T., 2023, *Perceived Inclusion in South Africa: Examining the Effect of Belonging and Value for Uniqueness on Behavioral Outcomes*, Masters dissertation, University of Cape Town.

Nickerson, C., 2022, 'Interpretivism paradigm & research philosophy', *Simply Sociology* 5, 1–16.

Osborne, J.J., 2025, Exploring the Experiences of Neurodivergent Educators in Schools (Doctoral dissertation).

Poni, M., 2014, 'Research paradigms in education', *Journal of Educational and Social Research* 4(1), 407–407. https://doi.org/10.5901/jesr.2014.v4n1p407

Robinson, S. & Truscott, J., 2013, *Belonging and connection of school students with disability*. Children with Disability Australia, viewed 06 June 2025, from https://www.cyda.org.au/belonging-and-connection.

Silberman, S., 2015, *NeuroTribes: The legacy of autism and the future of neurodiversity*, Avery, New York, NY.

Silverman, D., 2013, *A Very Short, Fairly Interesting and Reasonably Cheap Book about Qualitative Research*, Sage.

Singh, M. & Jansen, J.D., 2024, 'Turning the spotlight on the politics, power and problems in primary education', *South African Journal of Childhood Education* 14(1), 2. https://doi.org/10.4102/sajce.v14i1.1610

Singer, J., 2017, *Neurodiversity: The birth of an idea*, Self-Published.

Vygotsky, L.S., 1978, *Mind in society: The development of higher psychological processes*, Harvard University Press, Cambridge, MA.

Westwood, P., 2018, *Inclusive and adaptive teaching: Meeting the challenge of diversity in the classroom*, Routledge, London.