

The provision of learning support in mainstream schools: a South African perspective on learning support advisors' roles, experiences, and challenges¹

Faith Johnson, ORCID: 0000-0001-2017-5161, Centre for Interdisciplinary Studies of Children, Families and Society/People, University of the Western Cape, Bellville, South Africa

Prof Charlene Erasmus, ORCID: 0000-0002-1404-7294, Centre for Interdisciplinary Studies of Children, Families and Society/People, University of the Western Cape, Bellville, South Africa

ABSTRACT

Inclusive education (IE) is transforming global education by integrating, supporting, and empowering learners facing barriers while challenging educators to enhance their skills. In South Africa, understanding White Paper 6 and the Screening, Identification, Assessment, and Support (SIAS) Policy is critical for implementing effective support structures that foster academic success. Learning support advisors (LSAs) play a key role in bridging traditional learning methods and the social model approach to support learners with educational barriers. This study qualitatively examines the experiences, challenges, and roles of LSAs in public mainstream schools in the Western Cape, South Africa. Using purposive sampling, semi-structured interviews were conducted and field notes collected from selected advisors. Thematic analysis identified key themes, including assessment accommodations for learners with specific barriers, monitoring of interventions, professional development, and challenges. Findings highlighted both the support LSAs provided and the challenges they experienced in providing learning support.

Keywords: learning support, learning support advisors (LSAs), barriers to learning, experiences, inclusive education.

INTRODUCTION

Inclusive education (IE) is globally recognised as a fundamental right that promotes heterogeneity, fairness, and access for all learners in public mainstream schools (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2015b). In alignment with this principle, the South African government joined the global movement for IE by becoming a signatory to the Salamanca Statement of 1994 (UNESCO, 1994; Walton & Rusznyak, 2019), committing to providing every child with access to quality education. This principle should be universally applied, irrespective of abilities and differences (UNESCO, 1994; Walton &

¹ Date of Submission: 19 July 2024
Date of Review Outcome: 21 March 2025
Date of Acceptance: 4 April 2025

Engelbrecht, 2022; Walton & Rusznyak, 2019). Such an approach promotes a human rights perspective, where every learner feels welcomed, respected, and supported (Engelbrecht, 2017; Walton & Rusznyak, 2019). Additionally, it enables learners to collaborate, support one another, and engage with the curriculum (Engelbrecht, 2020; Engelbrecht et al., 2017; Finkelstein et al., 2021).

The global educational landscape continues to evolve, integrating learners with learning difficulties into public mainstream education (Nel et al., 2016). This shift towards greater diversity, transformation, and development (Engelbrecht, 2020; Engelbrecht et al., 2017; Walton & Engelbrecht, 2022) necessitates a supportive environment with adequate structures and resources to address learners' diverse needs and overcome barriers to learning (Walton & Rusznyak, 2019).

In South Africa, two key policies – Education White Paper 6: Special needs Education (Department of Education (DoE), 2001) and the National Strategy on Screening, Identification, Assessment, and Support (SIAS) Policy (Department of Basic Education [DBE], 2014) – outline a continuum of support, emphasising early intervention strategies and defining the roles of teachers, administrative staff, and District-Based Support Teams (DBSTs) in providing academic and social support (DBE, 2014). To facilitate the effective implementation, the DBE appoints Learning Support Advisors (LSAs) and Learning Support Teachers (LSTs) within the DBST to assist learners with barriers (DBE, 2014; Dreyer, 2013). LSAs are specialised district officials with teaching qualifications and in-depth knowledge of these policies (DBE, 2014). Their primary role is to educate in policy compliance and implementation while overseeing LSTs (Dreyer, 2013; Maree et al., 2023; Western Cape Government, n.d). They provide frameworks, mentorship, and advice to strengthen schools' capacity to deliver quality education (DBE, 2014; Dreyer, 2013). Additionally, LSAs engage directly with schools, offering classroom and organisational support, specialised assistance for learners and educators, and guidance on curriculum development, institutional governance, and administration (DBE, 2005, p. 6). By helping educators to provide individualised support, LSAs also empower parents to assist their children at home (Engelbrecht et al., 2017; Finkelstein et al., 2021; Lindner & Schwab, 2020).

Internationally, professionals with similar advisory and supervisory roles exist under different titles, though the implementation of their roles can vary slightly due to regional policies and education systems. For instance, in England, they are known as Area SENCO (Department for Education and Department of Health and Social Care, 2015), while in Australia, they are referred to as Special Education Consultants (Westwood & Graham, 2003). Despite the differences in naming conventions, their functions closely align with those of LSAs in South Africa, as they are responsible for managing and coordinating support services, providing training, and facilitating support for educators and other stakeholders (Department for Education and Department of Health and Social Care, 2015; Westwood & Graham, 2003).

LITERATURE REVIEW

Examining the experiences of LSAs in South Africa requires an understanding of the broader educational landscape, as their roles and challenges are shaped by historical and systemic factors. Three decades into democracy, the South African educational landscape continues to grapple with the legacy of the apartheid regime (Engelbrecht, 2020; Walton & Engelbrecht, 2022). The abolition of apartheid policies (Donohue & Bornman, 2014; Walton & Engelbrecht,

2022) has enabled marginalised learners from diverse ethnic groups, cultures, religions, languages, and abilities to access schools of their choice. However, systemic challenges such as resource constraints, gaps in teacher training, and inconsistency in policy implementation continue to impact IE (Donohue & Bornman, 2014; Engelbrecht, 2020; Muthukrishna & Engelbrecht, 2018; Walton, 2018; Walton & Engelbrecht, 2022). This approach to IE marks a departure from the medical model of support, which focused on 'fixing' learners in specialised educational settings, to a social model of support that recognises both intrinsic and extrinsic barriers to learning (DoE, 2001; 2014; Donohue & Bornman, 2014; Dreyer, 2015). Within this framework, educational support – whether informal, formal, or professional – is essential for overcoming these barriers and fostering academic success (DBE, 2014; Makhalemele & Nel, 2015).

The DBST in the school district plays a central role in providing a continuum of educational support services. These multidisciplinary teams include psychologists, counsellors, therapists, and health and welfare professionals, alongside LSAs and LSTs. Additionally, SBSTs, peer support networks, parents, grandparents or caregivers, and non-governmental and community-based organisations contribute to this intersectoral collaboration support system (DBE, 2005; Nel et al., 2014; Makhalemele & Nel, 2015). Within this structure, the LSAs play a vital role by directly providing learner support, facilitating assessment accommodations, and monitoring interventions for learners at risk (Makhalemele & Nel, 2015). Assessment accommodations, such as extended time, font enlargement, or modification of the learning environment, are essential to ensure that learners can participate in learning activities and demonstrate their abilities (Lindner & Schwab, 2020). The LSAs also strengthen the educational environment through professional development, resource allocation, policy implementation, and collaboration with various stakeholders (DBE, 2005; 2014; Dreyer, 2013). By providing ongoing professional development or training, the LSAs ensure that teachers adhere to policy implementation and stay current with the latest developments in IE (Maebana & Themane, 2019), ensuring that no learner is left behind. By fostering intersectoral collaboration, the LSAs create a holistic and integrated approach to learning that supports and addresses learners' needs, ensuring academic success (DBE, 2005). International studies have shown that providing adequate formal support services positively influences learners' academic progression (Datta, 2015; O'Rourke & Houghton, 2006).

LSAs play a crucial role in enhancing the teaching and learning environment. Their job description outlines key responsibilities that guide them in providing effective learner support:

- Provide training and support to LSTs, teachers, and support staff on legislation and policy implementation for learners experiencing barriers to learning
- Design and implement goals/needs-driven programmes to prevent and address learning barriers
- Ensure teachers have the necessary knowledge and skills to teach according to their timetable
- Implement the SIAS Policy by conducting assessments and providing short term curriculum interventions

- Collaborate with multidisciplinary teams, including the DBST and SBST, to support learners experiencing curriculum barriers to learning
- Offer advisory services to SBSTs on learning support strategies
- Monitor support programmes for learners with high-level needs, including those referred to or awaiting placement in special schools
- Conduct research and analyse data to identify trends and address educational needs within the district
- Participate in district-level inter-and intra-sectoral forums to enhance system capacity, address learning barriers, and promote inclusive schools as Centres of Care and Support for Teaching and Learning
- Collaborate with multidisciplinary teams at special schools, resource centres, and full-service/inclusive schools to support learners facing curriculum barriers
- Guide LSTs in implementing policies and guidelines related to learning support
- Oversee assessment, reporting, referral, and placement processes based on learners' needs
- Ensure effective administration and record-keeping for LSTs, including performance appraisals within the district
- Motivate, train, and guide LSTs to achieve excellence in service delivery
- Utilise databases and information management systems to generate reports for schools and districts
- Develop training materials and support plans for LSTs and schools
- Analyse assessment data and reports, maintain updated LSA files, and oversee LST leave registers and labour-related matters. Response to e-mails, telephone calls, queries and requests from schools and the district
- Attend district and provincial meetings (Western Cape Educational District Work Plan, 2024-2025, n.d).

Despite their crucial role, LSAs in South Africa face significant challenges in implementing IE policies, a situation compounded by the country's unique cultural and historical legacy, when compared to more affluent Global North countries (Donohue & Bornman, 2014; Engelbrecht, 2020; Muthukrishna & Engelbrecht, 2018; Walton, 2018; Walton & Engelbrecht, 2022). IE in South Africa has a broader meaning, focusing not only on access but also on the inclusion of previously marginalised learners based on race, culture, and language. Donohue and Bornman (2014) argue that the South African Education White Paper 6 is overly idealistic, failing to consider the country's unique cultural and historical context. They assert that IE, as described in White Paper 6, requires a flexible pedagogical approach, while the current Curriculum Assessment Policy Statement (CAPS) is too rigid, potentially hindering the implementation of IE. Educators struggle to implement the policies (Mahlo, 2013), facing challenges such as

overcrowded classrooms, low literacy rates, and a shortage of specialist educational staff and instructional materials (Muthukrishna & Engelbrecht, 2018; Walton & Engelbrecht, 2022).

Studies indicate that the national government still fails to provide adequate funding for resources such as assistive devices, teacher training, and infrastructure improvements, more than two decades after the publication of White Paper 6 (Andrews et al., 2019; Mahlaule et al., 2024; Makhalemele & Nel, 2015; Mbelu & Maguvhe, 2024; Walton & Engelbrecht, 2022). Furthermore, insufficient human resources and therapists continue to hamper the establishment of full-service/inclusive schools (Makhalemele & Nel, 2015; Motitswe, 2014; Van Staden-Payne & Nel, 2023). These challenges hinder the effective implementation of IE, slowing the process by making it difficult to define, interpret, and comprehend a single meaning, which causes it to evolve over time (Finkelstein et al., 2021; Engelbrecht et al., 2017; Muthukrishna & Engelbrecht, 2018; Walton & Engelbrecht, 2022).

Despite the challenges of implementing IE, it aligns with global frameworks such as the Salamanca Statement (1994), the UN Convention on the Rights of Persons with Disabilities (2006), and Sustainable Development Goal 4 (UNESCO, 2015a), all of which advocate for equitable access and non-discrimination in public mainstream schools. By integrating these principles into White Paper 6 (DoE, 2001) and the SIAS Policy (DBE, 2014), South Africa demonstrates its commitment to IE at a global level (Donohue & Bornman, 2014; Dreyer, 2013; Engelbrecht, 2020; Engelbrecht et al., 2017; Materechera, 2020). Countries such as Finland, the United States (US), Australia, and South Africa have implemented a three-tiered support system, where an inclusive approach is followed, with class educators providing differentiated instruction within mainstream education at tier 1. These countries employ learning support educators (SENCOs) and a variety of professionals to collaborate closely with class educators in mainstream settings to provide additional support through co-teaching, assessments, and discussions of learners' overall progress in class (Ahtiainen et al., 2021; DBE, 2014; Honkasilta et al., 2019; Jahnukainen & Itkonen, 2021; Jahnukainen et al., 2023; Tichá et al., 2018; Schimke et al., 2022; Waitoller & Thorius, 2015). Additionally, researchers from the Global North have contributed to best practices in the implementation of inclusive education, helping to identify what works best and where improvements are needed (Walton, 2018). Similarly, Scopus ranks South Africa as one of the leading countries in publishing research on IE, which significantly helps in promoting inclusive education through policies and programmes targeting the marginalised population (Engelbrecht, 2020).

However, differences emerge in policy implementation globally, such as the Comprehensive School Act (476/1983) in Finland (Ahtiainen et al., 2021; Jahnukainen et al., 2023), which provides clear directives and guidelines for educators to follow. In contrast, policy implementation in South Africa is weak due to its ambiguity and poor enforcement, preventing it from being carried out effectively (Donohue & Bornman, 2014). Wealthy Global North countries are known for providing quality education through their well-resourced mainstream and special educational systems, integrating most learners with disabilities into public mainstream schools and resulting in a very small out-of-school population (Walton, 2018). In contrast, South Africa faces challenges such as limited resources, funding, human capital, and inadequate infrastructure (Engelbrecht, 2020), which has led to approximately 70% of learners with disabilities being excluded from school, while the remaining 30% attend special schools rather than public mainstream schools (Donohue & Bornman, 2014).

Although extensive research exists on the theory and practice of IE (Ainscow, 2020; Walton & Engelbrecht, 2022), limited studies specifically focus on the experiences of LSAs within DBSTs in South Africa. This is particularly significant given the important role LSAs play in the provision of learning support. Existing studies mainly address challenges faced by the DBST as a collective (Makhalemele & Nel, 2015; Nel et al., 2016), and limited attention is given to the role of LSAs within these teams. Makhalemele and Nel (2015) identified several challenges faced by DBSTs, including inadequate training from the National Department of Education, resource constraints (e.g., infrastructure, electronic devices, data, and personnel), limited transport, and inefficiencies in the referral process. Nel et al. (2016) also reported that the DBST referral process is often ineffective or slow, with insufficient support and in-service training for educators. Additionally, Makhalemele and Nel (2015) noted that DBSTs struggle to define their roles and the most effective ways to fulfil them. While these challenges affect the DBSTs, they do not capture the experiences and role of LSAs in their interactions with teachers when visiting schools to provide support. Despite these challenges, LSAs are striving to create an inclusive school environment by applying their expertise and providing guidance and support to teachers and other stakeholders (DBE, 2014; Dreyer, 2013). This enables them to equip educators with the knowledge and skills needed to provide effective learning support for struggling learners (Lindner & Schwab, 2020; Mamabolo et al., 2021). This study seeks to address this research gap.

To address this research gap, it is important to examine these aspects through relevant theoretical frameworks. In this study, the theoretical framework is based on the theories of social constructivism (SC) and Bronfenbrenner's bio-ecological systems theory (BEST).

SC suggests that learners construct new knowledge through communication and interaction by sharing their ideas and insights with each other, thereby collectively building and agreeing on new knowledge within their cultural and social context. Therefore, knowledge is socially constructed through collaboration among learners, peers, and educators in a supportive learning environment (Amineh & Asl, 2015; Silalahi et al., 2022; Zhang, 2023). Learning is seen as an active and evolving process, and through participation (Amineh & Asl, 2015), learners use their prior knowledge in new situations to internalise and assimilate knowledge to solve problems (Shah, 2019). The Zone of Proximal Development (ZPD) is a key concept in this theory, highlighting the tasks that learners can perform with proper guidance and support from educators, parents, or skilled peers, allowing them to grow within their ZPD to meet the performance standards of a task (Alghamdy, 2024; Van Der Stuyf, 2002). SC is relevant to this study as it emphasises the importance of social interactions, collaboration, and guided support in the learning process. Through this lens, the experiences and roles of LSAs can be understood in their contribution to providing learning support, making education more accessible and equitable for struggling learners. Additionally, through their interactions with educators and other stakeholders in the educational environment, they offer guidance and support to enhance inclusive teaching practices and learner development.

The BEST of human development offers a holistic framework that emphasises how a person's development unfolds through complex interactions between individuals and their environment, as well as broader societal influences across multiple ecological systems (Bronfenbrenner & Ceci, 1994; Mulisa, 2019; Swart & Pettipher, 2016). These systems include the microsystem (e.g., relatives, friends, peer groups; school, residence, and neighbourhood), which affects an

individual immediately and shapes their behaviour (Johnson, 2010; Mahlo & Hugo, 2013; Mulisa, 2019; Nel et al., 2016; Swart & Pettipher, 2016). The mesosystem refers to the interactions between two or more microsystems (physical and virtual) in which a child actively participates, such as the relationships among parents, school, home, family members, digital environment, and peers (Nel et al., 2016; Navarro & Tudge, 2022; Swart & Pettipher, 2016). The ecosystem (parents' workplace, policies, social welfare, resources, social media) consists of settings where the child does not play an active role but is affected by what is happening in these settings (Johnson, 2010; Mulisa, 2019; Nel et al., 2016; Swart & Pettipher, 2016). The macrosystem (social and economic systems; societal values; political trends; ethnicity; belief systems and practices) has a significant influence on all the other systems that affect the development of a growing person (Mulisa, 2019; Nel et al., 2016; Swart & Pettipher, 2016). The chronosystem refers to the transitions and changes that a growing individual undergoes throughout their development and the societal events that reflect the impact of time on an individual's growth and development (Nel et al., 2016; Mulisa, 2019; Tudge et al., 2009). The BEST has evolved to highlight the critical role of proximal processes in development (Merçon-Vargas et al., 2020; Mulisa, 2019; Swart & Pettipher, 2016; Tudge et al., 2022; Xia et al., 2019). By applying this theory, we can better understand how the interactions between LSAs, educators, and policies influence the support provided to struggling learners. These interactions occur across multiple ecological systems, strengthening support structures and providing educators with guidance in designing and implementing holistic and adaptable intervention strategies that align with inclusive education.

AIM OF THE STUDY

The aim of this study is to provide a comprehensive understanding of how LSAs in South Africa perceive and experience their roles, as well as the challenges they face in public mainstream education, as they endeavour to provide effective learning support.

RESEARCH QUESTIONS

To address the aim, the following research questions were formulated:

1. How do LSAs perceive and experience their role in providing support and creating an inclusive environment?
2. What challenges do LSAs encounter in providing effective learning support in public mainstream education?

METHODOLOGY

Study setting and design

A qualitative research design was employed to address the research questions. This design allows for an in-depth exploration of LSAs' perceptions and experiences, providing rich, detailed insights (Braun & Clarke, 2006) in an area where knowledge is limited (Hunter et al., 2019) regarding their roles and the challenges they face. It facilitated a deeper understanding of these issues while also enabling the summarisation and comprehension of the area of interest (Hunter et al., 2019).

Recruitment and selection

The study was conducted in the Metro East District of the Western Cape, South Africa. Purposive sampling was employed to identify the LSAs, allowing the researcher to gather the most relevant information from participants who possess the specific knowledge and experiences necessary

to address the research question (Guest et al., 2020). The LSA participants are employed by the Western Cape Education Department (WCED) and are based in the Metro East District of the Inclusive and Specialised Learner and Educator Support Services of the Western Cape. The Deputy Chief Education Specialist: Learner Support assisted in identifying the LSAs and providing a venue for the interviews, thus acting as a gatekeeper.

The Inclusive and Specialised Learner and Educator Support unit consists of nine LSAs, and this study, which forms part of a larger project, recruited a total of five LSAs, with one participant testing the interview tool. The tested tool allowed the researcher to (i) identify any unclear points, repetitions, or potential biases, (ii) address practical obstacles that may arise during the main study, (iii) refine the research tool, and (iv) improve the wording of the questions (Noor, 2008; Chenail, 2011). This sample size was sufficient and manageable, allowing for in-depth engagement and a detailed exploration of the LSAs' experiences and perceptions of their roles and the challenges they encountered while providing support in public mainstream education.

In qualitative research, smaller sample sizes are acceptable (Clarke & Braun, 2013; Hennink & Kaiser, 2022) since the goal is to gain rich, detailed insights rather than broad generalisations (Braun & Clarke, 2006; Creswell & Creswell, 2018). Saturation can occur early in data collection, particularly when working with a homogeneous group and addressing a narrow research aim, as was the case in this study (Hennink & Kaiser, 2022). The LSAs' extensive experience and expertise allowed them to provide deep insights, yielding valuable and comprehensive data. As a result, a smaller sample size was sufficient to achieve the study's objectives. Data saturation was reached by the fourth interview, with no new themes emerging by the fifth. Responses became repetitive, reflecting the structured framework of the DBSTs, where LSAs' roles and challenges are relatively consistent across schools. This ensured that the data collected were both comprehensive and in-depth (Saunders et al., 2018).

Data collections and tools

This study was approved by the Humanities and Social Science Research Ethics Committee (reference no: HS22/9/15) of the University of the Western Cape, with consent obtained from the WCED to access the research site and participants. Semi-structured interviews were used as the primary data collection method, using pre-determined questions and follow-up probing to clarify responses (Guest et al., 2020). This approach allowed for in-depth exploration while maintaining a structured yet flexible framework (Kallio et al., 2016).

Face-to-face interviews with the selected LSAs were conducted in English and Afrikaans, following a pre-defined interview guide. Each session lasted 45 and 60 minutes, was recorded, and supplemented with observational cues and field notes to capture contextual details. Data collection continued until saturation was reached, when no new information or themes emerged, and further coding was no longer feasible (Guest et al., 2020).

Before the interviews began, the participants were informed that their participation was entirely voluntary. They were asked to complete a self-administered questionnaire, which included biographical information such as gender, age, language, race, educational qualifications, and professional experiences related to their level of education and IE. This preliminary information was essential for understanding the participants' responses within their working context. Furthermore, the participants were required to provide their consent, and they were assured

that they could withdraw from the study at any time without penalty. Pseudonyms were used to protect the participants' identities and ensure the confidentiality of their personal information.

Data analysis

A thematic analysis approach was employed to uncover, examine, organise, describe, and interpret key themes, providing a rich, detailed description of the data (Braun & Clarke, 2006). The data analysis framework developed by Braun and Clarke (2006) facilitated a comprehensive understanding of the participants' lived experiences and the challenges they face. This framework enabled a structured process for identifying, analysing, and reporting themes that are central to understanding how the LSAs experience and perceive their role and challenges in South Africa. The interviews were subsequently transcribed verbatim.

The analysis process involved six distinct steps: First, I familiarised myself with the data by listening to the audio recordings and noting initial ideas from the LSAs. Next, I read the transcripts multiple times to familiarise myself with the content. I then identified relevant excerpts and assigned initial codes, aligning these with the research questions and highlighting key points related to the LSAs' perceptions of their roles and challenges in providing learning support within public mainstream schools. After coding, I grouped similar codes into broader categories to form themes. These themes were reviewed, refined, and, where necessary, discarded to ensure clarity, coherence, and distinction, ensuring they provided meaningful patterns across the various transcripts. I then defined and named the themes, clarifying their significance. Finally, I compiled a report of the findings and integrated quotes from the LSAs to illustrate and support each identified theme.

To ensure trustworthiness, member checking was employed by sending the interview transcriptions to the participants via email for confirmation of their accuracy (Rowlands, 2021). To maintain validity and reliability, the research process was discussed with a colleague who is an expert in working with learners with mild cognitive disabilities at the WCED. This discussion confirmed that the study was methodologically sound and that the interpretation of the data accurately reflected the participants' responses. Additionally, regular meetings with the research supervisor were held throughout the study to discuss the research process, ensuring an unbiased approach and reinforcing the integrity of the finding.

By acknowledging the study's limitations, the practice also enhanced confirmability. Dependability was maintained by detailing the study setting, participant recruitment, sample size, data collection procedures, and time allocation for conducting the study, allowing for replication if needed.

RESULTS

The results of this study are presented in two parts: (1) the role of LSAs in public mainstream schools, and (2) the challenges experienced by LSAs during the provision of learning support. Several key themes were identified within these sections, as discussed below.

Part 1: Role of LSAs in public mainstream schools

Assessment accommodation for learners with specific barriers

Curriculum differentiation as a didactic approach

Curriculum differentiation is recognised by some LSAs as a valuable didactic approach for specific learners with barriers. This approach involves adjusting assessments, adapting lessons,

and providing individual support tailored to meet the needs of each learner. One aspect of curriculum differentiation is assessment accommodation, which allows learners with specific needs to demonstrate their abilities. The LSAs assist in identifying learners who require assessment accommodation and agree that cooperation and collaborative efforts with various stakeholders during the SBST meetings are crucial when discussing assessment accommodations for learners. One participant noted the following:

The first thing is always identification; you need to identify that this learner has a problem with a certain area or struggles. Uhm ... and then, through observation uhm ... or whatever apply the necessary curriculum differentiation uhm ... educational experiences that might help this learner to develop (LSA2).

Adhering to the SIAS process is crucial for students eligible for assessment accommodations. Schools submit applications for these accommodations through the WCED's Centralised Educational Management Information System (CEMIS). Once approved, learners receive the recommended assistance as outlined in the psychologist's report. Their progress is then closely monitored to determine whether additional accommodations are necessary. In this regard, the LSAs expressed the following:

Assessment and accommodation are not for a guy who functions at a low level or performs well under grade level. The assessment is there for the little guys who can have the understanding or have the potential to be able to perform at grade level (LSA 3).

After having a test and report from a psychologist, along with the diagnosis, that means depending on what the recommendation was of that psychologist, the learner can have enlarged font on the tests. They can have a separate venue, extra time, um ... a reader or a scribe or something like that, um, breaks even, um, spelling concession[s] (LSA 1).

Monitoring of intervention for learners at risk

Record-keeping

Monitoring the intervention involves placing at-risk learners on a tracking form to assess their learning progress and the support they receive following the intervention. LSAs play a crucial role in monitoring and evaluating this tracking process, ensuring that at-risk learners or those facing learning barriers receive the necessary support and intervention to achieve academic success through the strategies implemented. The participants shared the following insights:

We often work with the tracking forms that the mainstream teacher completes to identify which learner[s] are not making progress within the mainstream. We also work with the schedules quarterly to implement interventions. Additionally, I look at which learner[s] I can identify according to their birth dates and whether they repeated a grade before, uhm... and they are still not making progress (LSA 3).

We regularly monitor intervention[s] by checking the learner on the tracking form and verifying if the SIAS process has been applied to these learners. We review learners' profiles to see if there has been regular communication with the learner, if the Support Needs Assessment-1 [SNA-1] has been completed, and if there has been an SBST discussion. As LSAs, it is part of our duties to monitor learners who need support to ensure they receive it (LSA 4).

Additionally, teachers are required to document all support activities and intervention strategies provided to learners with barriers in a booklet. This booklet serves as evidence of the academic support implemented in the classroom and is reviewed and monitored by the LSAs during their school visits. The participants shared the following:

You go into the classroom and ask for the intervention books, if there are any. Check if the interventions have been or [are] being done in their books. We check if the intervention plan and the intervention book are aligned. The practice should show that this learner is indeed being helped and, on his level (LSA 4).

I go in[to] more detail in the learner's work itself, the learner's book, how they write, how they read, and what I pick up there (LSA 3).

By monitoring their progress, teachers are responsible for ensuring that learners are not excluded from their classes and that academic support is provided at the appropriate level. Both the teacher and the LSAs use this documented history as a common point of reference to assess whether learners are making progress, require additional assistance, or if adjustments need to be made to their assessments and written work.

Professional development and training

Workshops and training

As part of their roles and responsibilities, LSAs are tasked with providing training for mainstream teachers (MTs), LSTs, and the SBST. The participants agreed that they organised workshops for MTs, LSTs, and the SBST, focusing on the SIAS Policy and differentiation. According to the SIAS Policy, the LSAs are expected to support and train these groups to enhance their ability and capacity to address learning challenges and offer effective support (DBE, 2014, pp. 28, 30). These workshops equipped MTs, LSTs, and the SBST with the necessary skills and knowledge to improve and support learners' academic performance in line with the SIAS Policy. This is evident in the viewpoints expressed below:

... so, we equipped mainstream teachers and learning support teachers by doing training. So, we offer training like learning styles, how to differentiate in your small groups, how to approach phonics, sensory, objects that children can use just to make their sensory overload a bit less (LSA 1).

As a group of LSAs, we have many trainings and PowerPoints that we will present at schools, such as SBSTs, such as SIAS, such as differentiation, such as intervention. Everything is based around our policies (LSA 4).

We do SBST trainings at school. We sit in and we monitor the processes. We advise and we also train, um... and support the SBSTs, advise, and [give] information as to how to address the issues being discussed. So, and yeah, as we've said, if we find they are not functioning, we provide guidance and guidelines and training (LSA 2).

By conducting these workshops, the LSAs ensure that teachers are proficient, capable, and competent in applying various strategies to include all learners. This is achieved through practical training sessions and follow-up assessments (DBE, 2014). Additionally, these workshops help educators stay updated on the latest developments in inclusive practices.

Advisory function

The participants also mentioned that if educators are uncertain about their next steps, guidance is offered through school visits or upon request. This assistance aims to provide educators with advice, help, or additional insights, as illustrated in the following excerpt:

When cases or questions come my way, then I will contact the school and then have discussions with them, and even sit in with the SBST, or even go into the class, and try to find out what has already been done, what they are struggling with (LSA 3).

As part of the LSAs' commitment to ongoing professional development, they maintain an open-door policy and are accessible through various communication channels. This sentiment was echoed by the participants as follows:

... and [we have] continual communication through your WhatsApp groups, Google Classroom, coordinator of the SBST, or the principal of the school (LSA 3).

We also communicate with them on a daily basis on WhatsApp, or email, or anything like that. As soon as they need help, we try to get on it (LSA 1).

Furthermore, one participant mentioned that they regularly visit schools and engage with the Head of Department (HOD) or the SBST coordinator to inquire about the school's needs and to offer assistance, such as referrals to psychologists or social workers. This was illustrated in the following statement:

... we try to pop in, mostly at the Foundation Phase, we try to pop in by the HOD or the SBST coordinator just to check in if there's anything that I can help with to refer them to our psychologist or social worker (LSA 1).

This approach fosters a collaborative environment among all stakeholders, encouraging open dialogue, the sharing of experiences, and the addressing of challenges related to IE.

Part 2: Challenges experienced by LSAs during the provision of learning support

Policy implementation

The LSAs reported encountering various challenges that hinder their ability to effectively perform their duties. One major challenge is the lack of adherence by teachers to the SIAS process, as described below:

It is difficult to follow a policy, especially our new teachers do not always have the knowledge. They heard about the SIAS process, but they do not know the practical application of the policy (LSA 4).

... the procedures, the SIAS ... need to be followed. Sometimes it's difficult for [the] teacher to understand why the SIAS processes [need] to be followed, but it is necessary when that child is giving trouble in that class (LSA 2).

Resource constraint

All of the participants agreed that the needs in schools exceed what they can address. The following excerpts capture these views:

One advisor has approximately 21 schools, but one school comes with 20 cases so it's really difficult to deal with and stay on top (LSA 1).

One of the biggest challenges is these massive needs, and the needs are so great with so many learners requiring support, it is simply not possible to support everyone (LSA 3).

Another challenge is that the educational programme does not adequately support learners whose cognitive abilities lag significantly behind their peers' developmental progress. One participant expressed her dissatisfaction, as captured in the following statement:

We have a crisis with our 15-, 16-, and 17-year-old learners. If they are in Grade 7 or Grade 8 then they are performing four to five years below their grade levels. There are not enough schools of skills. Parents ... treat the school as a day care. They prefer to have their children in school even if they do nothing, understand nothing, rather have them on the streets (LSA 3).

Challenges related to job effectiveness

Firstly, the LSAs encountered financial constraints that compelled them to use their personal electronic devices to perform their jobs efficiently and competently outside the office. The following quote highlights the difficulties they have faced:

...We use our own laptops, cell phones, airtime, and dongles ... If you want to work or report from anywhere away from the office, you absolute[ly] have to use your own resources (LSA 3).

Secondly, the LSAs acknowledge that submitting their administrative reports on time is a challenge. Due to the extensive reporting required for school visitations, they often find themselves updating their reports after the visits have taken place. In this regard, the participants had the following to say:

To reduce my workload, maybe my admin work. You have a lot of reporting to do regarding school visitations ... you have to submit that reports and once you start falling behind, it becomes a problem for you ... (LSA 4)

I think the one thing many of us struggle with is the time ... The administrative and reporting tasks are often neglected or left behind. You can only manage to get your reports up to date a long time after the visits (LSA 3).

Lastly, there is a need to increase the manpower of LSAs and expand support services for learners, incorporating additional professional experts:

I think we need more LSAs and specialist[s] based at such schools, social worker[s], [a] clinic system, [and] a doctor for [a] specific number of schools so that effective support can take place (LSA 2).

DISCUSSION

The provision of learning support is a widely debated concept that can only be fully understood, interpreted, and implemented within the specific learning environment in which it is applied. Scholars agree that providing effective learning support remains a significant challenge (Finkelstein et al., 2021; Engelbrecht et al., 2017; Muthukrishna & Engelbrecht, 2018; Walton & Engelbrecht, 2022). This study aimed to provide a comprehensive understanding of how LSAs in South Africa perceive and experience their roles and the challenges they encounter in public

mainstream education while striving to provide effective learning support. Four themes emerged from the data analysis: assessment accommodation for learners with specific barriers, monitoring of intervention, professional development, and challenges experienced by LSAs within mainstream education.

The study revealed that adhering to the SIAS process is mandatory before extending professional assistance or academic support to learners. Screening typically occurs at the beginning of the year or when a learner is identified as needing additional support (DBE, 2014: 24). Effective implementation requires collaboration, communication, and consultation with all stakeholders, including parents, to address barriers that learners might face and to ensure that classroom adaptations adequately support academic performance (DBE, 2014: 35, 26; Pillay & Tlale, 2024). Nel et al. (2014) highlight that both international and national research indicates that a strong collaborative partnership can improve inclusive education practices.

To support this structured and fair process of identification, assessment, and intervention support (DBE, 2014), LSAs facilitate workshops and training on the SIAS process, equipping teachers with the necessary knowledge and skills needed for effective implementation (Pillay & Tlale, 2024). Additionally, in collaboration with the SBST, LSAs direct adherence to policy guidelines by confirming the school's capacity to provide the necessary assessment accommodation before applying via the CEMIS system. This structured support fosters learners' personal growth, academic success, and facilitates transition to higher education, as endorsed by the SIAS process (DBE, 2014).

Furthermore, LSAs oversee assessment accommodations, which require a psychologist's report to ensure eligibility and prevent bias. Donohue and Bornman (2014) advocate for this top-down approach as an effective method for translating policy into practice, a strategy that LSAs employ effectively.

The findings revealed that LSAs generally perceive the professional development and training they provided as adequate. However, this contrasts with the findings of Nel et al. (2016) and Mahlo (2017), which indicate that teachers feel inadequately trained. This gap suggests a discrepancy between the LSAs' perceptions of the adequacy of training and the teachers' actual experiences. Nevertheless, the training initiatives equip educators with essential skills and knowledge to manage the administrative aspects of inclusion, enabling them to implement policy effectively and support learners' development and growth (Matolo & Rambuda, 2022).

Additionally, the findings emphasise the importance of LSAs tracking learners' academic progress using tracking forms and reviewing classroom intervention activities. This strategy aligns with a differentiated teaching approach, tailored to meet the individual needs of learners (Finkelstein et al., 2021). By ensuring accurate identification of learning barriers, teachers can provide appropriate support, reinforcing the principles outlined in White Paper 6 (DoE, 2001) and the SIAS framework (DBE, 2014; Matolo & Rambuda, 2022).

By reviewing quarterly schedules, LSAs gain a comprehensive overview of learners' academic performance over the four quarters, identifying those who continue to struggle despite the support provided. During this process, LSAs consider factors such as birth dates and grade repetition, as these may indicate gaps in learning. Recognising these patterns enables LSAs to ensure that appropriate interventions are in place, preventing struggling learners from being

overlooked in the classroom (DBE, 2014; Van der Merwe et al., 2020; Walton, 2013). These evaluations facilitate discussions on instructional improvements, targeted strategies, and the enhancement of teaching and learning (Lindner & Schwab, 2020).

The findings further demonstrate LSAs' ongoing collaboration with educators and SBST through workshops, open communication channels, and on-site visits. This engagement strengthens support structures, providing educators with guidance and resources to address learning barriers. Additionally, it empowers them to create an environment where all learners feel safe and progress at their own pace (Finkelstein et al., 2021; Mahlo, 2016; Lindner & Schwab, 2020).

The study also revealed the need for additional human resources and adequate infrastructure to support learners functioning four to five years below grade level. LSAs and teachers face significant challenges due to a shortage of specialised learning institutions, which infringes on these learners' right to quality education (Motitswe, 2014; Nel et al., 2016). These gaps contribute to backlogs, potential dropouts, and heightened stress for educators (Nel et al., 2016). Addressing this requires a multifaceted approach, including increasing the number of LSAs and integrating professionals such as psychologists, doctors, and social workers to provide timely academic, social, and emotional support. This inter-sectoral approach ensures comprehensive support and ultimately enhances learners' academic performance (Datta, 2015; DBE, 2005; 2014; Dreyer, 2013; O'Rourke & Houghton, 2006). Furthermore, we recommend that the provincial education department build sufficient schools of skills or Adult Basic Education and Training (ABET) centres that operate during the day to better accommodate learners who are functioning four to five years below grade level. Providing these learners with specialised support fosters equity, enhances their well-being (Deroncele-Acosta & Ellis, 2024), and enables them to become productive members of society, contributing to economic growth and national development (Makwembere, 2023).

LSAs are overwhelmed by time-consuming administrative tasks due to extensive reporting requirements and a lack of personal electronic devices on-site to manage their workload during school visits. Providing these resources would streamline the reporting process, improve workload management, facilitate efficient feedback to schools, and enhance time management – an issue also emphasised by Mouton and Malumbete (2023).

LIMITATIONS

This study has several limitations. Firstly, the small sample size of five participants limits the generalisability of the findings. However, the sample was sufficient to gather rich data and ensure data saturation. Additionally, the study was conducted in a single school district, the Metro East District in the Western Cape of South Africa, which further restricts the applicability of the results. To enhance generalisability, future research should increase the sample size and replicate the study across the remaining seven districts. Despite these limitations, the results are promising and contribute to our understanding of how LSAs experience their roles and the challenges they face in providing effective learning support in public mainstream schools.

IMPLICATION FOR THEORY AND FUTURE RESEARCH

The findings of this study align with SC and BEST, deepening our understanding of LSAs' perceived roles and challenges in public mainstream education. LSAs play an important role in intervention monitoring, professional development, and assessment accommodation, while

also experiencing challenges in policy implementation and job effectiveness. The emphasis on collaborative learning support aligns well with SC theory, as LSAs guide educators in the SIAS process, ensuring appropriate assessment accommodation and the monitoring of intervention strategies (Amineh & Asl, 2015; Zhang, 2023). LSAs also assist in scaffolding the learning environment (Alghamdy, 2024; Van Der Stuyf, 2002), where differentiated interventions foster mutual support between educators and learners.

Furthermore, LSAs operate within Bronfenbrenner's BEST recognising a holistic approach to interactions across multiple systems, such as the school (microsystem), educator collaboration (mesosystem), and policy adherence (macrosystem) in supporting learners' development (Mulisa, 2019; Swart & Pettipher, 2016). The role of LSAs is shaped by institutional policies within the ecosystem, as they monitor compliance and provide training (Smit et al., 2020). However, the systemic constraints at the macro level that impact inclusive practices highlight broader structural challenges.

Future research could compare LSA models across different school contexts (e.g., urban vs rural schools, well-resourced vs under-resourced schools, or different educational districts). Such studies would provide valuable insights into context-specific challenges and best practices related to LSAs' advisory and support roles.

CONCLUSION

In conclusion, this study explored the roles, experiences, and challenges of LSAs, focusing on how they perceive their roles and the challenges they face in providing learning support within mainstream education. The study underscores the important role of LSAs in supporting inclusivity within public mainstream schools by ensuring that learners facing academic barriers receive appropriate intervention strategies and support. Additionally, LSAs provide guidance to educators, helping them implement these intervention strategies.

Firstly, it can be concluded that LSAs should possess extensive knowledge and skills related to educational policies and play a crucial role in implementing these policies in schools by providing professional development and training to educators and the SBST. This process can promote collaboration and meaningful conversations that strengthen the capacity of educators to support learners with barriers effectively, ensuring the successful implementation of inclusive practices. Thus, LSAs play a crucial role in the SIAS process, bridging the gap between policy and practice within schools. They also support differentiation and accommodation, making inclusion meaningful for every child.

However, LSAs believe they provide sufficient training, while the study by Nel et al. (2016) and Mahlo (2017) indicates that educators perceive it as insufficient. The implication is that training should address the challenges educators face in the classroom, and that LSAs should base their training on these challenges or on the feedback from educators.

Secondly, tracking learners' academic progress using tools such as tracking forms, reviewing schedules quarterly, and monitoring the intervention strategies provided in a booklet ensures that a proactive approach is applied, which aligns with a differentiated approach to teaching and learning. This process fosters accountability by ensuring that struggling learners do not fall behind and that intervention strategies are consistently applied to address barriers to learning.

Thirdly, the insufficient number of LSAs, coupled with a lack of professional specialists such as psychologists, social workers, and doctors, limits the support available for learners, especially with the increasing demand for additional assistance. Consequently, an inter-sectoral approach is essential to provide holistic support for learners, along with a clear timeline for those performing below the expected grade level.

Lastly, the administrative workload is perceived as a significant challenge. Providing LSAs with electronic devices would streamline their administrative tasks, enhance workload management, and enable them to deliver timely and effective feedback to schools. This indicates that systemic changes in reporting procedures are needed to reduce the administrative burden.

REFERENCES

- Ahtiainen, R., Pulkkinen, J., & Jahnukainen, M. (2021). The 21st century reforms (re) shaping the education policy of inclusive and special education in Finland. *Education Sciences*, 11(11), 750. <https://doi.org/10.3390/educi1110750>
- Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7-16. <https://doi.org/10.1080/20020317.2020.1729587>
- Alghamdy, R. Z. (2024). English teachers' practice of classroom discourse in light of zone of proximal development theory and scaffolding techniques. *Journal of Language Teaching and Research*, 15(1), 46-54. <https://doi.org/10.17507/jltr.1501.06>
- Amineh, R. J. & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), 9-16. <https://doi.org/10.1080/20020317.2020.1729587>
- Andrews, D., Walton, E. & Osman, R. (2019). Constraints to the implementation of inclusive teaching: a cultural historical activity theory approach. *International Journal of Inclusive Education*, 25(13), 1508-1523. <https://doi.org/10.1080/13603116.2019.1620880>
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Bronfenbrenner, U. & Ceci, S. J. (1994). Nature-nuture reconceptualized in developmental perspective: A bioecological model. *Psychological Review*, 101(4), 568.
- Chenail, R. J. (2011). Interviewing the investigator: Strategies for addressing instrumentation and researcher bias concerns in qualitative research. *Qualitative Report*, 16(1), 255-262. <https://doi:10.46743/2160-3715/2011.1051>
- Clarke, V. & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120-123.
- Creswell, J. W. & Creswell, J. D. (2018). *Research designs: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage. United States of America.
- Datta, P. (2015). An exploration into the support services for students with a mild intellectual disability. *International Journal of Inclusive Education*, 19(3), 235-249.

Department for Education and Department of Health and Social Care. (2015). *Special educational needs and disability code of practice: 0-25 years*. HM Government, United Kingdom. <https://www.gov.uk/government/publications/send-code-of-practice-0-to-25>.

Department of Basic Education (DBE). (2005). *Conceptual and operational guidelines for the implementation of inclusive education: District-Based Support Teams*. Government Printer. Pretoria, South Africa.

Department of Basic Education (DBE). (2014). *Policy on Screening, Identification, Assessment and Support*. Government Printer. Pretoria, South Africa.

Department of Education (DoE). (2001, July). *Education White Paper 6: Special needs Education. Building an Inclusive Education and Training System*. Government Printer. Pretoria, South Africa.

Deroncele-Acosta, A. & Ellis, A. (2024). Overcoming challenges and promoting positive education in inclusive schools: A multi-country study. *Education Sciences*, 14(11), 1169. <https://doi.org/10.3390/educsci14111169>

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

Dreyer, L. M. (2013). Exploring the changing role of learning support teachers. *Perspective in Education*, 31(2), 55-64.

Dreyer, L. M. (2015). Experiences of parents with children diagnosed with reading difficulties. *Southern African Review of Education with Education with Production*, 21(1), 94-111.

Engelbrecht, P. (2020). Inclusive education: Development and challenges in South Africa. *Perspects*, 49(3), 219-232. <https://doi.org/10.1007/s1125-020-09499-6>

Engelbrecht, P., Savolainen, H., Nel, M., Koskela, T. & Okkoli, M. A. (2017). Making meaning of inclusive education: classroom practices in Finnish and South African and South African. *Compare: A Journal of Comparative and International Education*, 47(5), 684-702. <https://doi.org/10.1080/03057925.2016.1266927>

Finkelstein, S., Sharma, U. & Furlonger, B. (2021). The inclusive practices of classroom teachers: A scoping review and thematic analysis. *International Journal of Inclusive Education*, 25(6), 735-762. <https://doi.org/10.1080/13603116.2019.1572232>

Guest, G., Namey, E. & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PloS One*, 15(5), e0232076.

Hennink, M. & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, 292, 114523. <https://doi.org/10.1080/13603116.2019.1620880>

Honkasilta, J., Ahtiainen, R., Hienonen, N. & Jahnukainen, M. (2019). Inclusive and special education and the question of equity in education: The case of Finland. In M. J. Schuelka, C. J. Johnstone, G. Thomas & A. J. Artiles (Eds.), *The SAGE handbook on inclusion and diversity in education* (pp.481-495). Sage. New York, United States of South Africa.

Hunter, D., McCallum, J. & Howes, D. (2019). Defining exploratory-descriptive qualitative (EDQ) and considering its application to healthcare. *Journal of Nursing and Health Care*, 4(1). <http://dl6.globalstf.org/index.php/jnhc/article/view/1975>

Jahnukainen, M. & Itkonen, T. (2021). Steps to inclusion? The role of tiered intervention in Finland and in the United States. In A. Köpfer, J. J. W. Powell & R. Zahnd (Eds.), *International handbook of inclusive education* (pp.234-256). Opladen & Toronto, Canada.

Jahnukainen, M., Hienonen, N., Lintuvuori, M. & Lempinen, S. (2023). Inclusion in Finland: Myths and realities. In M. Trupp, P. Seppänen, J. Kauko & S. Kosunen (Eds.), *Finland's famous education system: Unvarnished insights into Finnish schooling* (pp. 401-415). Springer Nature, Singapore.

Johnson, G. (2010). Internet use and child development: The techno-microsystem. *Australian Journal of Educational and Developmental Psychology (AJEDP)*, 10, 32-43.

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954-2965. <https://doi:10.1111/jan.13031>

Lindner, K. T. & Schwab, S. (2020). Differentiation and individualisation in inclusive education: A systematic review and narrative synthesis. *International Journal of Inclusive Education*, 1-21. <https://doi.org/10.1080/136031116.2020.1813450>

Maebana, M. E. & Themane, M. J. (2019). Reflections on workshops as a model for an ongoing professional teacher development for inclusive education in Limpopo Province, South Africa. *Journal of Educational Studies*, 18(2), 66-83.

Mahlaule, A. P., McCrindle, C. M. & Napoles, L. (2024). Inclusive education and related policies in special needs schools in South Africa. *African Journal of Disability (Online)*, 13, 1-10.

Mahlo, D. (2013). Theory and practice divide in the implementation of the inclusive education policy: reflections through Freire and Bronfenbrenner's lenses. *Mediterranean Journal of Social Sciences*, 4(13), 163-170. <https://doi:10.5901/mjss.2013.v4n13p163>

Mahlo, D. (2016). Defining inclusive education, inclusive teaching and inclusive classrooms. In M. P. van der Merwe (Ed.), *Inclusive teaching in South Africa*, (pp.3-20). Sun Press. Cape Town, South Africa. <https://doi:10.18820/9781928355038>

Mahlo, D. (2017). Teaching learners with diverse needs in Foundation Phase in Gauteng Province, South Africa. *SAGE*, 1-9. <https://doi.org/10.1177/2158244017697162>

Mahlo, D. & Hugo, A. (2013). Learning support teachers' views on the implementation of inclusive education in the foundation phase in Gauteng, South Africa. *Journal of Social Sciences*, 37(3), 301-306.

Makhalemele, T. & Nel, M. (2016). Challenges experienced by district-based support teams in the execution of their functions in a specific South African province. *International Journal of Inclusive Education*, 20(2), 168-184. <http://dx.doi.org/10.1080/13603116.2015.1079270>

- Makwembere, S. (2023). Disability inclusion in technical and vocational education and training legislation and policy: A comparison of South Africa and Eswatini. *Journal of Public Administration*, 58(3), 735-758. <https://doi.org/10.53973/jopa.2023.58.3.a14>
- Mamabolo, J. M., Sepadi, M. D., Mabasa-Manganyi, R. B., Kgoba, F., Ndlovu, S. M. & Themane, M. (2021). What are teachers' beliefs, values and attitudes towards the inclusion of learners who experience barriers to learning in South African primary schools? *Perspectives in Education*, 39(2), 239-252. <https://doi.org/10.38140/pie.v39i2.4402>
- Maree, C., Condry, J. & Meda, L. (2023). Exploring teachers' experiences in implementing the Screening, identification, assessment and support policy in South Africa. *South African Journal of Education*, 43(3). https://hdl.handle.net/10520/ejc-educat_v43_n3_a3
- Materechera, E. K. (2020). Inclusive education: Why it poses a dilemma to some teachers. *International Journal of Inclusive Education*, 24(7), 771-786. <https://doi.org/10.1080/13603116.2018.1492640>
- Matolo, M. F. & Rambuda, A. M. (2022). Evaluation of the application of an inclusive education policy on screening, identification, assessment and support of the learner at school in South Africa. *International Journal of Education and Practice*, 10(1), 11-24. <https://doi.org/10.18488/61.v10i1.2274>
- Mbelu, S. E. & Maguvhe, M. O. (2024). Evaluating the socioecological classroom in full-service schools: A whole-school approach to the inclusive education context in South Africa. *Education Sciences*, 14(11), 1151. <https://doi.org/10.3390/educsci14111151>
- Merçon-Vargas, E. A., Lima, R. F. F., Rosa, E. M. & Tudge, J. (2020). Processing proximal processes: What Bronfenbrenner meant, what he didn't mean, and what he should have meant. *Journal of Family Theory & Review*, 12(3), 321-334.
- Motitswe, J. (2014). The role of institute level support teams on addressing barriers to learning and provide support in schools. Are they functional? *Mediterranean Journal of Social Science*, 5(8), 259-264. <https://doi:10.5901/mjss.2014.v5n8p259>
- Mouton, N. & Malumbete, P. (2023). Exploring the challenges of curriculum advisors in schools in the Vhembe-West district, Limpopo province, South Africa. *South African Journal of Education*, 43(3). <https://orcid.org/0000-0001-9897-4775>
- Mulisa, F. (2019). Application of bioecological systems theory to higher education: Best evidence review. *Journal of Pedagogical Sociology and Psychology*, 1(2), 104-115.
- Mulisa, F. (2019). Application of bioecological systems theory to higher education: Best evidence review. *Journal of Pedagogical Sociology and Psychology*, 1(2), 104-115.
- Muthukrishna, N. & Engelbrecht, P. (2018). Decolonising inclusive education in lower income, Southern African educational contexts. *South African Journal of Education*, 38(4), 1-11. <https://doi.org/10.15700/saje.v38n4a1701>
- Navarro, J. L. & Tudge, J. R. (2023). Technologizing Bronfenbrenner: neo-ecological theory. *Current Psychology*, 42(22), 19338-19354.

Nel, M., Engelbrecht, P., Nel, N. & Tlale, D. (2014). South African teachers' views of collaboration within an inclusive education system. *International Journal of Inclusive Education*, 18(9), 903-917. <https://doi:10.1080/13603116.2013.858779>

Nel, N. M., Tlale, L. D. N., Engelbrecht, P. & Nel, M. (2016). Teachers' perceptions of education support structures in the implementation of inclusive education in South Africa. *Koers*, 81(3), 1-14. <http://dx.doi.org/10.19108/koers.81.3.2249>

Noor, K. B. M. (2008). Case study: A strategic research methodology. *American Journal of Applied Sciences*, 5(11), 1602-1604. <https://doi.org/10.3844/ajassp.2008.1602.1604>

O'Rourke, J. & Houghton, S. (2006). Students with mild disabilities in regular classrooms: The development and utility of the Student Perceptions of Classroom Support Scale. *Journal of Intellectual and Developmental Disability*, 31(4), 232-242. <https://doi:10.1080/13668250601050310>

Pillay, E. & Tlale, L. D. N. (2024). The implementation of the Screening, Identification, Assessment and Support Policy to manage and support teaching and learning processes in KwaZulu-Natal. *E-Journal of Humanities Arts and Social Sciences*. <https://doi:10.38159/ehass.20245132>

Rowlands, J. (2021). Interviewee transcript review as a tool to improve data quality and participant confidence in sensitive research. *International Journal of Qualitative Methods*, 20, <https://doi.org/10.1177/16094069211066170>

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burrough, H & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, 52, 1893-1907. <https://doi.org/10.1007/s11135-017-0574-8>

Schimke, D., Krishnamoorthy, G., Ayre, K., Berger, E. & Rees, B. (2022). Multi-tiered culturally responsive behavior support: A qualitative study of trauma-informed education in an Australian primary school. *Frontiers in Education*, 7, 866266. <https://doi.org/10.3389/feduc.2022.866266>

Shah, R. K. (2019). Effective constructivist teaching learning in the classroom. *International Journal of Education*, 7(4), 1-13. <https://doi:10.34293/education.v7i4.600>

Silalahi, S. A., Zainal, A. & Sagala, G. H. (2022, January). The importance of deep learning on constructivism approach. In *2nd International Conference of Strategic Issues on Economics, Business and Education (ICoSIEBE 2021)* (pp.243-246). Atlantis Press. <https://doi:10.2991/aebmr.k.220104.036>

Smit, S., Preston, L. D. & Hay, J. (2020). The development of education for learners with diverse learning needs in the South African context: A bio-ecological systems analysis. *African Journal of Disability*, 9(1), 1-9.

Swart, E. & Pettipher, R. (2016). A Framework for understanding inclusion. In E. Landsberg, D. Kruger & N. Nel (Eds.). *Barriers to learning: A South African perspective* (3rd ed.) pp.3-21). Van Schaik.

- Tichá, R., Abery, B. & Kincade, L. (2018). Educational practices and strategies that promote inclusion: Examples from the US. *Social Education*, 68(2), 43-62. <https://doi.org/10.7441/soced.2018.06.02.03>
- Tudge, J. R., Merçon-Vargas, E. A., Liang, Y. & Payir, A. (2022). The importance of Urie Bronfenbrenner's bioecological theory for early childhood education. In L. E. Cohen & S. Waite-Stupiansky (Eds.), *Theories of early childhood education* (2nd ed.) pp.50-61). Routledge.
- Tudge, J. R., Mokrova, I., Hatfield, B. E. & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory & Review*, 1(4), 198-210. <https://doi.org/10.1111/j.1756-2589.2009.00026.x>
- United Nations (UN). (2006). *Convention on the right of a person with disability*. <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (1994). *The Salamanca statement and framework for action on special needs education*. <https://www.european-agency.org/sites/default/files/salamanca-statement-and-framework.pdf>
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2015a). *Incheon declaration and framework for action for the implementation of Sustainable Development Goal 4*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000245656>.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2015b). *World Education Forum 2015: final report*. <http://unecodoc.unesco.org/ark:/48223/pf000024372>
- Van der Merwe, M., Fourie, J. V., & Yoro, A. J. (2020). Learning support strategies for learners with neurodevelopmental disorders: Perspectives of recently qualified teachers. *African Journal of Disability*, 9(1), 1-10. <https://doi.org/10.4102/ajod.v9i0.561>
- Van Der Stuyf, R. R. (2002). Scaffolding as a teaching strategy. *Adolescent Learning and Development*, 52(3), 5-18.
- Van Staden-Payne, I. & Nel, M. (2023, January). Exploring factors that full-service school teachers believe disable their self-efficacy to teach in an inclusive education system. *Frontiers in Education*, 7, 1009423. <https://doi:10.3389/feduc.2022.1009423>
- Waitoller, F. R. & Thorius, K. K. (2015). Playing hopscotch in inclusive education reform: examining promises and limitations of policy and practice in the US. *Support for Learning*, 30(1), 23-41. <https://doi.org/10.1111/1467-9604.12076>
- Walton, E. (2013). Inclusion in a South African high school? Reporting and reflecting on what learners say. *International Journal of Inclusive Education*, 17(11), 1171-1185. <https://doi.org/10.1080/13603116.2012.742577>
- Walton, E. (2018). Decolonising (through) inclusive education? *Educational Research for Social Change*, 7(SPE), 31-45. <http://doi.org/10.17159/2221-4070/2018/v7i0a3>
- Walton, E. & Engelbrecht, P. (2022). Inclusive education in South Africa: path dependencies and emergences. *International Journal of Inclusive Education*, 1-19. <https://dio.org/10.1080/13603116.2022.2061608>

Walton, E. & Rusznyak, L. (2019). Developing standards for inclusive teaching in South Africa: A dilemma analysis. *Southern African Review of Education with Education with Production*, 25(1), 89-106.

Western Cape Educational District. (n.d). *Western Cape Educational District Work Plan, 2024-2025*. Western Cape, South Africa.

Western Cape Government. (n.d). *WCED specialised support services. Learning support*. <https://sites.google.com/wced.info/wced-specialised-services/home/learning-support>

Westwood, P. & Graham, L. (2003). Inclusion of students with special needs: Benefits and obstacles perceived by teachers in New South Wales and South Australia. *Australian Journal of Learning Difficulties*, 8(1), 3-15. <http://dx.doi.org/10.1080/19404150309546718>

Xia, M., Li, X. & Tudge, J. R. (2020). Operationalizing Urie Bronfenbrenner's process-person-context-time model. *Human Development*, 64(1), 10-20. <https://doi.org/10.1159/000507273>

Zhang, Z. (2023). Collaborative learning in social constructivism: Promoting English learning in a secondary classroom in China. *Journal of Education and Educational Research*, 3(3), 1-5. <https://doi.org/10.54097/jeer.v3i3.9509>