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The Sekhukhune Inclusive Classroom Framework for supporting inclusive teaching in rural primary schools

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Abstract

Inclusive education has emerged as a policy for ensuring equitable access to quality mainstream education for all learners. However, translating inclusive education policy into meaningful classroom practice remains disproportionate, particularly in rural and under-resourced schools. The paper draws on Vygotsky's Social Constructivism and Bronfenbrenner's bio-ecological systems theory to provide a multi-level understanding of inclusive teaching and develop the Sekhukhune Inclusive Classroom (SIC) framework, a contextually grounded framework designed to support the implementation of inclusive teaching in rural South African primary schools. The study used qualitative data from eight participant teachers across four primary schools in two circuits in Sekhukhune South District, Limpopo Province. Using an interpretivist research paradigm and a single case study design, data were collected through lesson observations, semi-structured interviews and focus group discussions, and analysed using thematic data analysis. The findings revealed persistent structural and teaching challenges. In response, the Sekhukhune Inclusive Classroom framework was developed as an empirically grounded and theoretically informed model. The paper contributes a context-sensitive model that bridges the gap between inclusive education policy and classroom practice. It offers practical guidance for teachers, school principals, the Department of Basic Education and policymakers seeking to strengthen inclusive teaching in resource-constrained schools.

1. Introduction

Inclusive teaching has become a central principle of 21st-century education. Ainscow (2020) asserts that inclusive education is a defining feature of contemporary education reform, driven by global commitments to equity, access for diverse learners, and social justice. However, despite progressive policy frameworks in South Africa, including the introduction of Education White Paper 6, implementation of inclusive education remains uneven, particularly in rural, under-resourced schools. Malahlela and Johnson (2024) and Korkie et al. (2025) accentuate the gap between policy and practice in rural contexts, where schools face systemic, structural, and contextual challenges. International frameworks such as the Salamanca Statement and Sustainable Development Goal 4 stress the need for inclusive systems to accommodate all learners, regardless of their learning needs, abilities, or socioeconomic backgrounds (UNESCO, 2023). In South Africa, inclusive education is central to the post-apartheid transformation agenda, aiming to address past imbalances and ensure access to quality education (Department of Education, 2001). This study argues that the persistent gap between inclusive education policy and classroom practice in rural South African schools reflects the limitations of existing inclusion approaches, which often fail to account for contextual and systemic challenges.

Internationally, research positions teachers as central agents in implementing inclusive education, as they mediate policy through adaptive teaching practices, classroom interactions, and assessment practices (Ainscow, 2020; Page at al., 2022). However, these studies suggest that although education systems continue to adopt progressive inclusion policies, many teachers remain insufficiently prepared to implement inclusion meaningfully in diverse classrooms. Page et al. (2022) argue that inclusive

education reforms outpace teacher preparation, forcing teachers to implement inclusive teaching without adequate training or institutional support. Similarly, teachers experience tensions between policy expectations and classroom realities, particularly in contexts characterized by structural and systemic challenges (UNESCO, 2023). Within African contexts, these challenges are intensified by structural inequalities, underfunded schooling systems and uneven access to specialist support services. Studies conducted across rural African schools indicate that teachers implement inclusive education under conditions characterized by overcrowded classrooms, limited teaching resources, inadequate infrastructure and limited professional development opportunities (Phiri, 2021; Ajani & Ntombela, 2024). These studies suggest that implementing inclusive education requires sustained investment in teacher capacity, contextual support, and systemic transformation.

Studies on inclusive education done within South Africa by Magumise and Sefotho (2020), Nketsia (2020), and Sepadi and Themane (2023) have largely focused on identifying challenges to implementing inclusion. Similarly, Ndlovu (2022), Malahlela et al. (2024), and Korkie et al. (2025) conducted studies in Limpopo and other rural provinces, South Africa, revealed that teachers often struggle to implement inclusive teaching effectively because they operate in under-resourced environments characterised by poverty, multilingual classrooms, and limited access to specialist support services. While these studies have documented the structural and systemic challenges associated with inclusive education, a notable gap remains in the literature for practical, context-specific frameworks that translate empirical findings into meaningful guidance for inclusive teaching in rural South African schools. As a result, teachers and schools have limited scholarly guidance on implementing inclusive teaching strategies in rural, resource-constrained schools. This gap is particularly significant in rural South African schools, where contextual realities differ from the assumptions underpinning mainstream inclusive education frameworks. This study addresses this gap by developing the Sekhukhune Inclusive Classroom (SIC) framework.

This study is motivated by the need to move beyond identifying challenges to inclusive education and develop a practical, theoretically grounded framework to support inclusive teaching in rural primary schools. By exploring teachers' inclusive teaching experiences, adaptive strategies and professional practices, the study seeks to generate empirical insights that inform the development of the SIC framework. In doing so, the study contributes to inclusive education literature by foregrounding teacher agency, contextual realities and systemic constraints in the conceptualisation of inclusive teaching. Therefore, this study asks: *How can primary school teachers in the Sekhukhune South District be guided to implement the inclusive education framework?*

2. Literature review

This section reviews the literature on inclusive teaching strategies in rural mainstream primary schools in the Sekhukhune South District, with focus to the contextual and systemic conditions that shape teachers' capacity to support diverse learners.

2.1 Inclusive education and the policy-practice gap

Inclusive education is generally conceptualised as a transformative process that identifies and removes barriers to learning and participation for all learners (Ainscow & Messiou, 2018). This conceptualisation extends beyond integrating learners with disabilities and instead emphasises systemic change within mainstream education systems to ensure equity, access, and meaningful participation (Messiou, 2022). However, while inclusive education has been intensely underscored in global and national policy frameworks, a growing body of empirical research highlights a persistent disjuncture between policy aspirations and classroom realities (Ainscow, 2020).

Internationally, researchers argue that inclusive education policies are often characterised by what Ainscow (2020) describes as 'aspirational rhetoric', where policy commitments to inclusion are not sufficiently supported by the conditions necessary for implementation. This gap between policy and practice is particularly evident in contexts where education systems are required to implement inclusion without corresponding initiatives in teacher development, infrastructure and support systems (UNESCO, 2020). Consequently, inclusion often remains a policy aspiration rather than a fully realised classroom practice.

In the South African context, this gap is exceptionally noticeable. Engelbrecht et al. (2023a) posit that although the introduction of Education White Paper 6 marked a significant policy shift towards inclusive education, its implementation has been disproportionate and constrained by systemic limitations. Moreover, empirical studies indicate that schools continue to face challenges related to inadequate resource allocation (Walton, 2018), insufficient institutional support (Nel & Tlale, 2019) and limited teacher preparedness (Mngo & Mngo, 2018). These findings suggest that policy reform alone is insufficient. Therefore, the successful implementation of inclusive education requires sustained systemic investment and coordinated support across multiple levels of the education system.

The gap between policy and practice is further intensified in rural contexts, where structural inequalities and socio-economic imbalances intersect to shape educational experiences. In districts such as Sekhukhune South, schools often operate with limited teaching and learning resources, overcrowded classrooms, and constrained access to professional development opportunities (Sepadi et al., 2023). Magumise et al. (2020), in a study of rural South African schools, show that these conditions significantly limit teachers' capacity to implement inclusive teaching, particularly when it requires differentiation, individualised support, and flexible assessment. Consequently, Korkie et al. (2025) and Aloka and Mamogobo (2025) argue that teachers are compelled to prioritise curriculum coverage over inclusive practices, marginalising learners who experience learning challenges.

2.2. Challenges of providing an inclusive education in under-resourced contexts

A critical limitation of existing inclusive education frameworks is their epistemological and contextual grounding, as many are conceptualised within well-resourced educational systems in which structural conditions such as manageable class sizes, availability of specialised support services, access to diverse teaching materials and sustained professional teacher development are assumed to be

normative (Florian et al., 2019). While these frameworks offer valuable theoretical insights into inclusive teaching, their transferability to under-resourced contexts remains a challenge. In rural South African schooling environments, including the Sekhukhune South District, these foundational assumptions are often absent, creating a misalignment between inclusive model design and the realities of classroom practice (Magumise et al., 2020). Consequently, teachers are expected to operate within conditions characterised by overcrowded classrooms, limited teaching and learning resources, linguistic diversity and constrained institutional support (Sepadi et al., 2023), thereby exposing the structural inadequacies of globally dominant frameworks.

Studies show that applying such frameworks in resource-constrained settings often results in superficial implementation rather than meaningful inclusion. For example, Mngo and Mngo (2018) found that teachers in rural schools struggled to implement inclusive strategies effectively because existing models lacked contextual adaptation, leading to compliance-driven rather than educationally transformative practices. Similarly, studies across Africa indicate that inclusive education frameworks frequently overlook socioeconomic differences, cultural dynamics and systemic inefficiencies that shape teaching and learning in these contexts (Nketsia, 2020; Opoku et al., 2020). As a result, inclusion becomes policy rhetoric rather than enacted practice, with teachers relying on improvisation and personal agency to bridge the gap between expectations and feasibility.

These limitations reveal that inclusive education frameworks tend to adopt a universalist orientation, insufficiently engaging with context-specific knowledge and lived experiences of teachers. As a result, this lack of contextual responsiveness undermines their practical effectiveness and sustainability in diverse educational settings. Against this backdrop, this paper argues that effective inclusive education frameworks must be both theoretically rigorous and empirically grounded in the contexts in which they are applied. Moreover, such frameworks should account for structural constraints, recognise teachers as adaptive agents, and provide flexible, context-sensitive teaching strategies that can be meaningfully enacted in resource-limited schools. Within this conceptual space, developing a locally grounded framework, such as the SIC framework, becomes relevant and necessary for advancing inclusive education in rural contexts.

2.3 Development of a context-sensitive framework of inclusion

Studies foreground the need to reconceptualise inclusive education through context-sensitive lenses that move beyond universalist orientations towards locally grounded, practice-oriented models (Ainscow, 2020; Messiou, 2022). Succinctly, this shift reflects a growing recognition that inclusion involves more than a technical implementation of policy directives; it is a complex, socially situated process shaped by historical, cultural, economic, and institutional conditions (Ainscow, 2020). As such, effective inclusive education frameworks must be rooted in empirical realities and informed by the lived experiences of teachers who navigate the everyday complexities of diverse classrooms. Ainscow (2020) maintains that

contemporary research advocates approaches that emerge inductively from practice, capturing how inclusion is interpreted, negotiated and enacted within local contexts.

Studies by Phiri (2021) and Korkie et al. (2025) reinforce this position by demonstrating that teachers in under-resourced and rural contexts often develop adaptive, contextually responsive strategies that are absent from formal policy frameworks. These findings highlight the importance of recognising teachers as policy implementers and critical agents whose professional decisions and adaptation practices are central to realising inclusion (Korkie et al., 2025). Furthermore, context-sensitive frameworks for inclusion must clearly engage with structural challenges, while simultaneously leveraging existing strengths within schools and communities. In this way, inclusion is reframed as a dynamic and contextually responsive process.

Within this evolving scholarly discourse, the SIC framework attempts to bridge the gap between inclusive education policy and classroom practice. The framework is both theoretically informed and empirically grounded, drawing directly on teachers' inclusive teaching experiences in rural Sekhukhune South District primary schools to construct a framework that is responsive to contextual realities. Furthermore, the framework acknowledges that inclusive education cannot be operationalised through standardised approaches, but requires ongoing adaptation to contextual conditions, learner diversity and resource availability. By integrating teaching practices with systemic considerations, the SIC framework advances a more refined understanding of inclusion as a situated practice, thereby offering a practical and conceptually robust tool to support teachers in rural schools.

3. Theoretical framework

The SIC framework is underpinned by complementary theoretical frameworks that collectively provide a multi-layered and analytically robust understanding of inclusive education. The frameworks conceptualise inclusion as a dynamic process situated at the intersection of classroom interactions and broader systemic influences. Social constructivism conceptualises learning as a socially mediated process in which knowledge is co-constructed through interaction, dialogue, and participation in shared activities (Vygotsky, 1978). In contrast, bio-ecological systems theory extends the analysis of inclusive education beyond the classroom by emphasising the role of connected environmental systems in shaping human development (Bronfenbrenner, 1979).

In the context of inclusive education, this perspective highlights that classroom practices cannot be fully understood in isolation from the structural conditions within which they are rooted. Teachers' ability to implement inclusive strategies is mediated by factors such as policy directives, resource availability, professional development opportunities, and the effectiveness of support structures. Moreover, studies by Florian et al. (2019) and Gillies (2021) have demonstrated that inclusive teaching strategies enhance academic engagement and promote social inclusion by fostering interdependence and mutual support among learners. Integrating Vygotsky's (1978) and Bronfenbrenner's (1979) theoretical perspectives enables the SIC framework to bridge the micro-level dynamics of classroom interaction with the macro-

level realities of educational systems, proposing a conceptually coherent and contextually responsive framework to guide the employment of inclusive teaching in rural primary schools.

4. Methodology

4.1 Context of the study

This study was conducted in rural primary schools in the Sekhukhune South District of Limpopo Province, South Africa, an area characterised by high levels of poverty, unemployment, limited infrastructure and unequal access to educational resources (Engelbrecht et al., 2023). Schools in the district face overcrowded classrooms and inadequate teaching and learning materials, which significantly constrain inclusive teaching practices (Sepadi et al., 2023). In this context, implementing inclusive education, as mandated by Education White Paper 6, poses additional challenges for teachers who must support diverse learners in under-resourced classrooms (Ndlovu, 2022). Therefore, this paper aims to develop a contextually grounded and empirically informed inclusive teaching framework, the SIC framework, by examining teachers' experiences of implementing inclusive teaching, with a specific focus on the strategies they employ, the challenges they encounter and the support structures available in rural schools.

4.2 Methodological Imperatives

This study was located within an interpretivist research paradigm, which assumes that reality is socially constructed and best understood through the meanings individuals attribute to their experiences (Nikerson, 2022). The interpretivist position was appropriate for this study as it enabled an in-depth exploration of teachers' experiences of employing inclusive teaching strategies within their rural primary schools (Flick, 2018). This paper aimed to generate contextually situated insights that could inform the development of a grounded framework for inclusive teaching.

The study employed a qualitative single-case study to explore inclusive teaching practices in different school contexts. Yin (2018) and Creswell and Creswell (2018) emphasise that a multiple case study design allows researchers to investigate inclusive education and its implementation practices in schools, enabling examination of similarities and differences across multiple schools and to develop a comprehensive understanding of inclusive education across multiple contexts (Denzin et al., 2023). This paper explored how teachers employ inclusive teaching strategies in rural primary schools.

A qualitative single-case study design explored teachers' experiences of inclusive teaching strategies in rural mainstream primary schools in the Sekhukhune South District. The embedded single-case design enabled both within-case and cross-case analyses, strengthening the analytical depth of this study (Silverman, 2020). Consequently, this enabled the identification of recurring patterns and context-specific variations in teachers' experiences. Furthermore, this design was appropriate for examining inclusive teaching strategies employed, which are shaped by dynamic interactions among individual, institutional, and systemic factors (Sheppard, 2021).

The study involved eight teachers drawn from four rural primary schools, selected through purposive sampling. Participants were selected based on their direct involvement in implementing inclusive education, ensuring that they possessed relevant experiential knowledge. This sampling strategy enabled the selection of information-rich cases that can provide detailed insights into inclusive teaching practices and challenges in resource-constrained environments.

Table 1
Profile of the schools and participants

Schools	Inclusive teachers (pseudonyms)	Gender	Age Category	Years of teaching experience	Number of learners in class	Language of teaching and learning	Grade
School A	Pebetsi	Female	25–30	5	50	Sepedi	1
	Mahlako	Female	30–35	7	52	Sepedi	3
School B	Hlabirwa	Male	35–40	7	64	English	7
	Ngwato	Male	50–55	26	62	English and home languages (MTbBE)	4
School C	Phogole	Male	50–55	25	66	English	6
	Modipadi	Female	30–35	6	60	English	5
School D	Mogotladi	Female	35–40	11	64	English	6
	Shatadi	Female	25–30	4	62	English	5

4.2.1 Data collection

Data were generated through semi-structured individual interviews and lesson observations, allowing methodological triangulation.

4.2.1.1 Lesson observations

Lesson observations enabled the researcher to examine how inclusive teaching strategies were enacted in practice (Creswell & Poth, 2023). We used an observation schedule in this study, which guided me in identifying aspects to look for to fulfil the objectives of the study. Observed aspects included teaching and learning resources, the integration of inclusion strategies into subject content, challenges arising from employing inclusive teaching strategies, factors hindering and enabling inclusion, and observed benefits. During lesson observations, we took notes to record and analyse the findings. The lesson observations took one to two hours daily for four to six weeks.

4.2.1.2Semi-structured interviews

Semi-structured interviews provided in-depth views of teachers' perspectives and experiences. This method gave participants flexibility to express their views while enabling the researcher to probe for additional information (Casteel & Bridier, 2021). The interview schedule guided the interviews, with the questions including 'What inclusive teaching strategies have you implemented to support diverse learners in your classroom?' and 'What challenges have you experienced while employing inclusive teaching strategies? Participating teachers received the interview schedule well before the interviews, which allowed them to clarify any potential areas of uncertainty. English was used as the medium of communication. The interviews lasted between 25 and 45 minutes.

These data collection methods enabled the researcher to gather rich and detailed information about teachers' inclusive teaching experiences and classroom practices. Data collection took place over two months during the second school term. Conducting the research during the school term allowed the researcher to observe normal classroom practices while minimising disruption to school activities.

4.2.3 Data analysis

Data were analysed thematically using Braun and Clarke's (2022) six-step analysis: (i) acquainting ourselves with the collected data, which involved immersing ourselves in the data by reading and rereading the transcripts to gain both a broad overview and an understanding of the details; (ii) generating codes, which involved examining the transcripts line by line and assigning initial codes that described what was happening in the data; (iii) developing themes, which involved clustering related codes into candidate themes, and refining themes by merging, splitting, and discarding them; (iv) reviewing themes, which involved conducting an internal validity check; that is, we checked to see if the themes aligned with the coded extracts. Thereafter, we conducted an external coherence check, assessing whether the themes supported the entire dataset. Some themes were refined during this phase; (v) defining and naming themes, which involved writing a detailed analysis of each theme, explaining its scope and significance, and ensuring that the themes told a compelling story about the data; and (vi) reporting, which involved communicating our analysis in a scholarly and transparent manner, presenting our discussion of the themes along with vivid data extracts, and contextualising findings in light of existing literature and the theory chosen to underpin the study.

4.2.4 Ethical considerations

We obtained ethical approval and permission from the Department of Basic Education and the UNISA College of Education Ethics Review Committee (reference number 2024/10/12/000000222/05/RB). Participants received an informed consent letter outlining participation expectations, including the study purpose, confidentiality measures, and data use. They were also informed that participation was voluntary and that they could withdraw at any time without penalty. The researchers obtained written consent and used pseudonyms to protect participants' identities.

5. Findings informing the Sekhukhune Inclusive Classroom (SIC) framework

The following themes emerged from the findings:

1. Structural conditions constraining the employment of inclusive teaching strategies
2. Systemic challenges in employing inclusive teaching strategies.
3. Teachers' adaptive and contextually responsive inclusive teaching practices.
4. Teacher agency and improvisation in rural inclusive classrooms.

5.1 Structural conditions constraining the employment of inclusive teaching strategies

The findings reveal that structural conditions shape and constrain the employment of inclusive teaching strategies in rural primary schools in Sekhukhune South District, affecting teachers' inclusive teaching practices and meaningful learning engagement.

Overcrowded classrooms emerged as a structural challenge constraining inclusive teaching practice. Participants described working in overcrowded classrooms with learners significantly exceeding recommended class sizes, which limited opportunities for individualised support, differentiated assessment, and meaningful differentiated instruction. Participants emphasised that overcrowding makes it difficult to respond to learner diversity, particularly in classrooms characterised by varying learner abilities, language differences and learning barriers. Ngwato explained this challenge of overcrowding: *"Another challenge is overcrowding. You find out in a classroom we are having about plus or minus 60 learners. Having such a big number, one is unable to pay individual attention to all learners."* Similarly, Shatadi reinforced the challenge of overcrowding: *"The challenge that I have experienced while employing inclusive teaching, it is overcrowded classes. In an overcrowded classroom, learners tend to make noise or disrupt the lesson."* Lesson observations further corroborated these assertions, with class sizes ranging from 50 to 66 learners. Collectively, these findings demonstrate that overcrowded classrooms create teaching and classroom management challenges that undermine teachers' ability to implement inclusive teaching effectively.

Inadequate teaching and learning resources also emerged as a challenge inhibiting the effectiveness of inclusion. Participants reported shortages of both basic teaching materials and specialised resources needed to accommodate diverse learner needs, particularly in multilingual and diverse learning classrooms. Hlabirwa explained the lack of teaching resources: *"Challenges that I come across are a lack of teaching resources or teaching aids. If you want to present a lesson using the visuals, you may find that in that particular class, there is no projector or smartboard. So, it disturbs the teaching and learning process."* Similarly, Mogotladi emphasised a need for teaching resources and teacher development for inclusion: "*We need to be provided with teaching materials specifically designed for inclusive classrooms. We must also be trained about inclusive education where it is detailed and practical for us teachers as to what is expected of us in our teaching."* These findings suggest that a lack of adequate teaching resources restricts teachers' ability to employ inclusive strategies such as multimodal teaching, scaffolding and differentiated instruction. Consequently, opportunities for learner engagement,

participation and comprehension become significantly reduced, particularly for learners experiencing learning barriers.

5.2 Systemic challenges in employing inclusive teaching strategies.

The findings also show that systemic challenges constrain teachers' employment of inclusive teaching strategies. These challenges relate to teacher preparation and professional development, curriculum requirements, and the support provided through school and district structures.

Inadequate training and professional development hindered effective inclusive practices. Participants expressed concerns about the lack of practical, sustained training to build the teaching competencies required for inclusive classrooms. Because they lacked formal professional preparation, participants said they relied on personal experience, trial-and-error approaches, and informal collegial support. Mogotladi explained self-reliance through trial-and-error: *"Sometimes we are not sure how we handle some learners. We just do what we think will work."* Likewise, Shatadi explained that: *"We are trying, but honestly, we did not get enough training about inclusive education."* Meanwhile, Hlabirwa explained sharing experiences with colleagues: *"When coming to inclusion, there was no proper training session and as teachers we share our experiences with each other."* These findings reveal that teachers are expected to implement inclusive education without theoretical grounding or sustained professional guidance, thereby producing inconsistent and individualised inclusive practices rather than coherent systemic implementation.

Curriculum rigidity was also a challenge as teachers negotiated an imbalance between curriculum requirements and learner responsiveness. The findings also indicate that curriculum rigidity, particularly within the Curriculum and Assessment Policy Statement (CAPS) framework, challenges inclusive teaching. Teachers perceived CAPS as prioritising curriculum coverage, standardisation and pace over responsiveness to learner diversity and contextual realities. Shatadi explained that: *"CAPS provides opportunities. However, the content-heavy structure, standardised assessments and a one-size-fits-all approach limit its inclusivity, disadvantaging learners with diverse needs."* Participants further reported feeling pressured to adhere strictly to Annual Teaching Plans (ATPs), often at the expense of meaningful learner support and differentiated instruction. Lesson observations reinforced this concern, showing that teachers prioritised curriculum completion over adapting teaching to learner pace. These findings suggest that curriculum rigidity creates tensions between policy expectations and classroom realities, limiting teachers' flexibility in pacing, assessment adaptation, and content modification.

Insufficient support from school management and district officials limits teachers' efforts to make inclusion work for all. Teachers expressed frustration regarding limited support from both the School-Based Support Teams (SBSTs) and District-Based Support Teams (DBSTs). Mahlako explained the delayed and inconsistent support from the district officials: *"The support is just less than 50%, because you will take an issue to them, it will take forever for them to come back to you… and we just be demotivated sometimes."* Similarly, Ngwato expressed a lack of support: *"There is not much support; we are just on our own."* Participants also reported limited guidance from school support teams on

implementing inclusive education in practice. Pebetsi remarked that: *"No, they do not support us. They just said that your school is an inclusive school. That is it… but what is it that as a teacher, I am expected to do?"* These findings reveal a disconnect between inclusive education policy expectations and the practical support provided to teachers, further intensifying teachers' sense of professional isolation and frustration.

5.3 Teachers' adaptive and contextually responsive inclusive teaching strategies.

Despite significant structural constraints, teachers demonstrated adaptability by employing contextually responsive, inclusive teaching strategies to manage learner diversity in resource-constrained classrooms. Participants constructed practical, classroom-relevant forms of inclusion that enabled learner participation and engagement within challenging schooling environments. Critically, these practices provide an empirical and conceptual foundation for developing the Sekhukhune Inclusive Classroom (SIC) framework. This is because they demonstrate how inclusive teaching emerges through the interaction between teacher agency and contextual realities.

1. ***Differentiated instruction as a contextually responsive, inclusive teaching strategy***

One adaptive inclusive teaching strategy identified in the study was the contextual implementation of differentiated instruction. Participants demonstrated an understanding that learner diversity requires flexibility in teaching approaches, assessment methods, and classroom engagement strategies. Participants adapted lesson presentation, pacing, language use, and assessment tasks in response to learners' varying abilities, backgrounds and learning needs. For example, Shatadi explained that *"inclusive education influences me to use different methods during my lessons such as visual aids, simplified text, and group work."* Meanwhile, Ngwato noted that *"I give my learners different assessments to check whether they have understood what I have taught."* Similarly, Modipadi described the strategic use of multilingualism as a differentiated teaching approach, explaining that *"sometimes some learners don't understand English, so I use their mother tongue to translate in order for them to understand."* These responses indicate that teachers attempted to diversify teaching processes and assessment practices as a practical and contextually responsive strategy for addressing learner diversity.

2. ***Cooperative learning and peer support as mechanisms for inclusion***

The findings also show that teachers employed cooperative learning and peer-assisted strategies to support inclusion. Group work and collaborative learning emerged as practical strategies teachers used to address learner diversity while simultaneously managing large class sizes. For example, Ngwato explained that learners were grouped according to varying support needs, stating that *"there is a group of those who can work on their own… then I pay special focus to those who are struggling."* Similarly, Shatadi noted that group work "encourages cooperation and mutual support and promotes inclusion and communication among my learners." Furthermore, Pebetsi explained that grouping learners *"in smaller groups and pairing them enabled learners to share their own experience."* This inclusive strategy enabled

teachers to provide targeted assistance to learners needing additional support while encouraging independent and collaborative learning among other learners. However, these collaborative practices extended beyond learner interactions to include teacher collaboration and informal professional learning communities. Mahlako described collaborative engagement among Grade 3 teachers, explaining that *"we share our experiences; we share our strategies. If this is not working for me, they get to make me understand other strategies."* This shows that teacher collaboration served both as professional support and as a way to strengthen inclusive classroom practice.

3. *Multimodal and multilingual teaching strategies*

Another adaptive practice identified in the findings was the use of multimodal and multilingual teaching approaches. Teachers demonstrated awareness that learners engage with knowledge differently and utilised varied teaching strategies to accommodate diverse learning styles and language backgrounds. These practices included visual materials, storytelling, demonstrations, audio-visual resources, and play-based learning strategies. Mahlako explained that *"learners that I have in my class, they learn best in visual."* Similarly, Hlabirwa noted that *"I also diversify the teaching and learning material to cater for those learners that learn by maybe visual or audio."* Furthermore, Phogole highlighted the use of multiple sensory approaches, explaining that *"sometimes I use teaching aids that are visuals, others are auditory… Other learners learn through play."* These findings suggest that teachers recognised learner diversity in learning styles, language, and modes of engagement. The strategic use of multimodal teaching enabled teachers to expand access to the curriculum and support learner participation within linguistically and academically diverse classrooms. In multilingual contexts, teachers used learners' home languages to scaffold understanding and bridge comprehension gaps, creating more inclusive learning opportunities.

4. *Parental involvement and home and school collaborations*

The findings also show that teachers extended inclusive teaching beyond the classroom by involving parents in the learning process. Participants described maintaining communication with parents and encouraging home-based learning support as part of their inclusive teaching strategies. These practices reflected an understanding that inclusion requires collaboration between schools, families and communities. Mogotladi explained that she created a WhatsApp group involving both learners and parents *"to share the activities that I have provided, to make it easier for the learners also to know what their activity was about."* Similarly, Modipadi stated that *"I involve parents and tell them, can you please check your learner's work, teach them how to read at home, and at the school, I will do the same."* These responses demonstrate how teachers sought to create continuity between home and school learning environments despite contextual limitations.

5.4 Teacher agency and improvisation in rural inclusive classrooms

Teachers displayed agency by improvising and adapting teaching and learning resources and processes in response to resource scarcity. Participants described using locally available materials, multilingual explanations and varied inclusive teaching strategies to accommodate diverse learner needs despite

limited access to specialised support resources. Hlabirwa explained that the lack of technological resources, such as projectors and smartboards, disrupted teaching; however, teachers continued to adapt lessons through alternative visual and oral strategies. Similarly, Modipadi demonstrated flexible teaching by using learners' home languages to scaffold understanding during lessons, particularly in Mathematics, stating that, *"Sometimes some learners don't understand English, so I use their mother tongue to translate in order for them to understand."* Such practices demonstrate contextual forms of inclusive teaching that emerge from teachers' ability to adapt teaching strategies within structurally constrained classrooms.

The findings further demonstrate that collaborative problem-solving and collegial support functioned as important mechanisms teachers used to sustain inclusive teaching practices. In the absence of consistent formal support from district structures and professional development programmes, teachers relied on informal professional learning communities to exchange strategies, reflect on challenges and co-construct practical solutions. Mahlako explained, *"We share everything; we share our experiences; we share our strategies. If this is not working for me, they get to make me understand other strategies that I did not know about."* This collaborative engagement reflects how teachers actively create informal networks of professional support to compensate for systemic deficiencies. Further, the findings suggest that inclusive teaching in rural schools is sustained through collective professional agency.

6 The Sekhukhune Inclusive Classroom (SIC) framework

The SIC framework conceptualises inclusive teaching as a dynamic, contextually situated process emerging from the interaction of five interdependent domains. The framework positions inclusion as a relational system in which educational practices, teacher dispositions, and structural conditions continuously shape one another. At the centre, the framework recognises that inclusive education in rural contexts is enacted through negotiation: between policy expectations and classroom realities, between learner diversity and curriculum demands, and between systemic constraints and teacher agency. *Figure 1* below summarises the SIC framework.

1. Teacher knowledge and beliefs

Beginning with the domain of teacher knowledge and beliefs, which operates as the epistemological foundation upon which all other practices are constructed. Teachers' conceptualisations of inclusion are shaped by historically situated discourses, professional training experiences and the material realities of their classrooms. In the rural Sekhukhune South District, where structural inequalities are deeply rooted, teachers often negotiate competing understandings of inclusion. This tension matters because it directly influences teaching decisions. Teachers who perceive learner diversity as a problem to be managed are more likely to adopt exclusionary practices, whereas those who conceptualise diversity as an inherent and valuable dimension of the learning environment are more inclined to enact responsive and flexible teaching. Therefore, the SIC framework foregrounds the need to reconfigure teacher

cognition as a critical entry point for inclusive reform, aligning with broader theoretical arguments that epistemological shifts are necessary for transformational teaching.

2. Inclusive teaching strategies

Building on this foundation, inclusive teaching strategies emerge as a manifestation of teachers' interpretive engagement with classroom diversity. In the Sekhukhune South District, the employment of strategies reflects both teaching intentionality and adaptive improvisation in response to contextual realities. Moreover, these strategies cannot be understood in isolation from the socio-material conditions in which they are deployed. For instance, differentiation in overcrowded classrooms often involves practical adjustments, revealing the situated nature of teaching practices. Therefore, the framework resists idealised representations of inclusive teaching and positions inclusive strategies as contingent, negotiated and context-dependent. This perspective resonates with Vygotsky's (1978) emphasis on mediated learning, where interaction, tools and context shape knowledge construction.

3. Assessment for inclusion

The domain of assessment for inclusion extends this analysis by examining how assessment practices can reproduce or eliminate exclusionary dynamics. In many South African classrooms, assessment remains closely tied to standardisation and accountability regimes, which prioritise uniformity over responsiveness. Similarly, teachers in Sekhukhune South District schools described the challenges of aligning inclusive intentions with a curriculum that emphasises pace and coverage, limiting opportunities for flexible assessment. The SIC framework positions assessment as a site of tension for teaching, where teachers must navigate the competing demands of policy compliance and learner responsiveness. Inclusive assessment, in this framework, means rethinking the purposes and processes of assessment in ways that recognise diverse forms of knowledge, learning, and participation. This reconceptualisation challenges dominant assessment standards and calls for a shift towards more formative, dialogic and learner-centred approaches.

4. Collaboration and support systems

The importance of collaboration and support systems is explained by recognising that inclusive education is inherently collective. Teachers in this study consistently emphasised the role of collegial support, informal knowledge sharing and community engagement in sustaining their inclusive practices. However, these forms of collaboration often emerged as compensatory mechanisms in the absence of consistent institutional support. Therefore, the SIC framework conceptualises collaboration as a structural necessity, particularly in under-resourced contexts. Drawing on Bronfenbrenner's (1979) ecological perspective, this domain highlights the interconnectedness of classroom practices with broader systems, including school leadership, district support structures and family networks. Participants' reports of limited functionality in formal support systems signal the need to strengthen systems to embed collaboration in institutional processes.

5. Adaptive learning environments

The final domain, adaptive learning environments, captures the material and organisational dimensions of inclusive education, recognising that physical space, resource availability and classroom management practices play a crucial role in shaping learning experiences. In Sekhukhune South District schools, overcrowded classrooms and limited infrastructure require high teaching adaptability. Teachers described reconfiguring classroom layouts, utilising locally available materials and employing flexible grouping strategies to maximise learner participation. Therefore, the SIC framework foregrounds environmental adaptation as a core component of inclusive teaching, challenging assumptions that effective inclusion can occur independently of resource conditions.

Summary of the SIC framework

The five domains of the SIC framework demonstrate that inclusive education in rural contexts is a negotiated process that cannot be reduced to policy directives or isolated classroom strategies. Rather, it requires an integrated approach that simultaneously addresses teacher cognition, teaching practices, assessment systems, collaborative structures and material conditions. The SIC framework offers a contextually grounded model that captures this complexity, positioning inclusive teaching as both a reflective and responsive practice shaped by the interplay of agency and structure.

7 Discussion of the findings

The SIC framework contributes to inclusive education research by addressing limitations in existing inclusive frameworks, which often present inclusion as a universal teaching ideal without adequately accounting for the structural inequalities that shape rural classroom practice. Literature on inclusive education promotes learner-centred approaches, collaboration, curriculum adaptation and flexible assessment as key principles of inclusive practice (Ainscow et al., 2018; Florian et al., 2019). While these principles are theoretically valuable, they are conceptualised within developed school environments where teachers have enabling systemic and contextual conditions. In the rural Sekhukhune South District, Ngwato and Shatadi emphasised overcrowded classrooms, while Hlabirwa and Modipadi highlighted inadequate teaching and learning resources, reinforcing the argument that the enabling conditions for inclusive teaching are lacking. By grounding the SIC framework in the lived experiences of teachers working under overcrowding, inadequate resources, curriculum pressure, and weak institutional support, this paper offers a contextually responsive framework for inclusive teaching that bridges the gap between policy intentions and classroom realities.

The framework extends the discourse on inclusive education by demonstrating that inclusion must be conceptualised as a dynamic process shaped by the interaction between teaching and context. This finding resonates with Walton's (2018) argument that inclusive education in South Africa remains constrained by structural inequalities inherited from broader socio-economic disparities, particularly in rural schools, where policy expectations are not matched by implementation support. Similarly, Nel and Tlale (2019) emphasise that inclusive education succeeds when teachers are willing to implement

inclusive teaching strategies and when systemic structures enable implementation. The SIC framework captures this by locating inclusive teaching within interconnected domains that recognise both teacher practice and systemic influence, thereby providing a more realistic and context-sensitive representation of inclusive education in practice.

The study findings affirm the relevance of Vygotsky's (1978) social constructivist theory as a lens for understanding inclusive teaching in resource-constrained classrooms. Ngwato and Mogotladi demonstrated that collaborative learning processes, such as peer tutoring, group work and shared classroom participation, were central to their efforts to support learner diversity. These strategies reflect Vygotsky's (1978) view that learning is socially mediated and that cognitive development occurs through interaction with more knowledgeable others. In contexts where teachers cannot provide intensive individual support because of large class sizes, collaborative learning becomes a practical way for learners to support one another's understanding and participation. Furthermore, the findings reinforce Aloka et al.'s (2025) argument that inclusive teaching should prioritise classroom interaction that expands participation opportunities. Through this lens, the SIC framework positions inclusive teaching strategies as relational practices that facilitate learner engagement through cooperation, dialogue and scaffolded participation.

The study also revealed that these inclusive teaching practices are influenced by broader structural conditions, which explains the significance of Bronfenbrenner's bio-ecological systems theory in informing the SIC framework. Bronfenbrenner's perspective emphasises that human development is shaped by interactions across nested systems, ranging from immediate classroom relationships to broader institutional and policy environments (Bronfenbrenner, 1979). The findings demonstrate that teachers' ability to implement inclusive teaching strategies is affected by multiple systemic factors, including school resources, departmental support, and curriculum expectations. For example, while Modipadi and Ngwato attempted to differentiate instruction and promote peer learning, overcrowded classrooms and limited access to teaching and learning materials undermined these efforts. This shows that inclusive teaching depends on both teacher competence and the broader ecological systems within which teachers work.

A significant contribution of the SIC framework is its emphasis on teacher agency within structurally constrained environments. The findings reveal that, despite several challenges, all teachers employed adaptive strategies such as improvising learning resources, restructuring classroom interactions and drawing on peer collaboration to sustain inclusive teaching practices. This demonstrates that teachers are not passive implementers of policy but active agents who implement inclusive education within the realities of their schools. These findings align with a study by Ayaya et al. (2022), which argues that teacher agency is central to implementing inclusive education, particularly in under-resourced schools where teachers must navigate tensions between policy expectations and contextual limitations. The SIC framework focuses on this agency by recognising teacher knowledge, beliefs and adaptive capacity as the foundation of inclusive teaching. In doing so, the framework highlights the professional judgement, resilience and contextual innovation teachers bring to their teaching contexts.

The empirical grounding of the SIC framework further enhances its significance by ensuring it emerges from the realities of classroom practice. Many inclusive education frameworks prescribe ideal practices without adequately reflecting how teachers adapt inclusive practices in constrained schools. In contrast, the SIC framework derives its five domains directly from teachers' experiences, making it both theoretically informed and relevant. This empirical grounding responds to calls by Ainscow (2020) and Messiou (2022) for inclusive education frameworks that are context-sensitive and responsive to classroom realities. As such, the framework provides a practical tool for teachers, school principals and the Department of Basic Education (DBE) by identifying key areas for intervention, including teacher development, inclusive teaching strategies, assessment adaptation, collaborative support and classroom responsiveness.

This paper demonstrates that the SIC framework reconceptualises inclusive teaching as a relational, adaptive and systemic process. It shows that inclusive teaching involves the ongoing negotiation between educational intentions and contextual realities. By integrating a social constructivist understanding of collaborative learning with ecological understandings of systemic influence, the framework offers a comprehensive model that captures the complexity of implementing inclusive teaching in rural schools. In doing so, it contributes both theoretically and practically to inclusive education literature by providing a contextually grounded framework for strengthening inclusive teaching in under-resourced rural schools.

8 Conclusion

The SIC framework makes a significant conceptual and practical contribution to inclusive education by offering a contextually grounded, empirically derived, and theoretically coherent model for employing inclusive teaching in rural schooling environments. By drawing directly on teachers’ experiences in Sekhukhune South District, the framework provides a refined understanding of how inclusive teaching is employed within conditions of constraint. In conclusion, the SIC framework advances the discourse on inclusive education by offering a contextually responsive and applicable model that bridges the gap between policy and practice. It affirms that inclusive education is a complex, negotiated and achievable process when supported by coherent teaching strategies, empowered teachers and responsive systems. By situating inclusive teaching within the realities of rural schooling, the study contributes to the ongoing effort to transform inclusive education from policy rhetoric into a sustainable and meaningful educational practice.

Declarations

Clinical trial number

Not applicable.

Ethical approval

This study was approved by the University of South Africa College of Education Ethics Review Committee under ethics approval/reference number *2024/10/12/000000222 /05/RB*. The study was conducted in accordance with the institutional ethical principles and guidelines of the University of South Africa governing research involving human participants. All research procedures, including participant recruitment, data collection, confidentiality and protection of participants' identities, were conducted in accordance with the approved ethical protocol.

Consent to participate

Informed consent was obtained from all participants before their participation in the study. Participants were informed about the purpose and procedures of the study, their voluntary participation, their right to withdraw from the study without penalty, and the measures taken to protect the confidentiality and anonymity of the information they provided. Participation commenced only after informed consent had been obtained.

Consent for publication

Not applicable, as pseudonyms were used to protect participants’ identities, and the manuscript reports no personally identifiable information.

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Author Contribution

The authors (Tlaka MI, Maja MM and Meeran S) conceptualised the study, developed the research design, collected and analysed data, interpreted the findings, developed the Sekhukhune Inclusive Classroom Framework, and drafted and revised the manuscript. The authors read and approved the final manuscript.

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Data Availability

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

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Figures

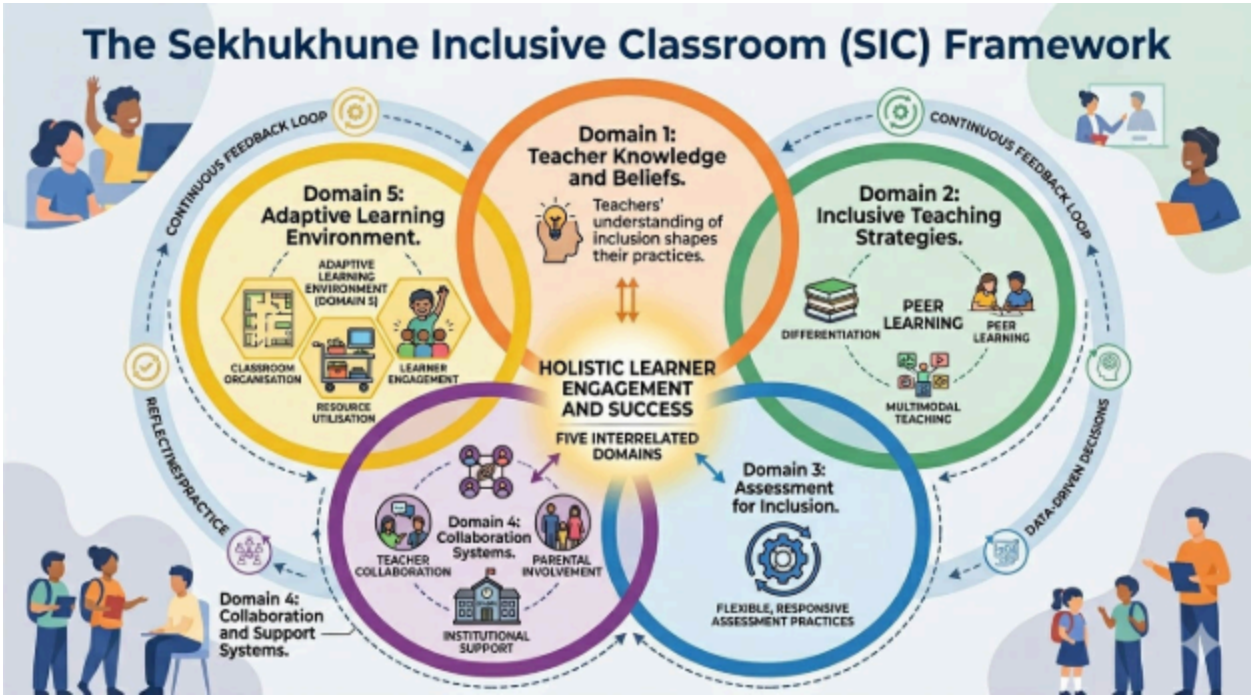


Figure 1

The Sekhukhune Inclusive Classroom (SIC) framework.