

<https://doi.org/10.34142/2709-7986.2025.30.2.18>

## EXPLORING SKILLS-RELATED CHALLENGES FACED BY EDUCATORS IN THE IMPLEMENTATION OF INCLUSIVE TEACHING AND LEARNING: A CASE STUDY OF THE THABO MOFUTSANYANA DISTRICT

ПРОБЛЕМИ РОЗВИТКУ ПРОФЕСІЙНИХ НАВИЧОК ПЕДАГОГІВ У ПРОЦЕСІ ВПРОВАДЖЕННЯ ІНКЛЮЗИВНОГО НАВЧАННЯ: ПРИКЛАД ОКРУГУ В ПІВДЕННІЙ АФРИЦІ

Received: 16/09/2025

Accepted: 21/10/2025

**Solomon MAKOLA<sup>1</sup>, Mkhumbulo NDLOVU<sup>2</sup>,  
& Lerata Jan MAKATE<sup>3</sup>**



<sup>1</sup>*Extraordinary Professor and Research Associate in the Department of Post Graduate Studies Education, Central University of Technology, Free State, South Africa.*

✉ **E-Mail:** [smakola@cut.ac.za](mailto:smakola@cut.ac.za)

 <https://orcid.org/0000-0002-9415-5681>



<sup>2</sup>*Senior Lecturer and Dean of the Faculty of Applied Social Sciences, Eswatini Medical Christian University, Eswatini and Research Associate in Department of Post Graduate Studies Education, Central University of Technology, Free State, South Africa.*


✉ **E-Mail:** [mk.ndlovu@emcu.ac.sz](mailto:mk.ndlovu@emcu.ac.sz)

 <https://orcid.org/0009-0006-3376-704X>



<sup>3</sup>*Master's student in Education at Central University of Technology, Free State, Welkom Campus, and currently practicing as a teacher in the Department of Education (Free State) at Thabo Mofutsanyana District.*

✉ **E-Mail:** [katenoisemakate@gmail.com](mailto:katenoisemakate@gmail.com)

 <https://orcid.org/0009-0002-6629-3427>

© Solomon MAKOLA, Mkhumbulo NDLOVU, & Lerata Jan MAKATE, 2025

**Exploring skills-related challenges faced by educators in the implementation of inclusive teaching and learning: A case study of the Thabo Mofutsanyana District** © 2025 by Solomon MAKOLA, Mkhumbulo NDLOVU, & Lerata Jan MAKATE is licensed under **Attribution-NonCommercial 4.0 International**. To view a copy of the license, visit <http://creativecommons.org/licenses/by-nc/4.0/>

**How to Cite (APA Style):**

Makola, S., Ndlovu, M., & Makate, L. J. (2025). Exploring skills-related challenges faced by educators in the implementation of inclusive teaching and learning: A case study of the Thabo Mofutsanyana District. *Educational Challenges*, 30(2), 234–247. <https://doi.org/10.34142/2709-7986.2025.30.2.18>

**ABSTRACT**

**Purpose.** The study aimed to explore skills-related challenges faced by educators in inclusive education environments in South Africa, focusing on the Thabo Mofutsanyana District.

**Methodology.** Grounded on qualitative methods, data were collected through semi-structured interviews with principals, educators who are School-based Support Team (SBST) committee members, district officials who are part of the District-Based Support Team (DBST) and Chairpersons of School Governing Bodies (SGBs), alongside document analysis of policies such as the Education White Paper 6 (EWP6).

**Results.** The findings revealed that educators encounter challenges in supporting learners with special education needs (SEN) due to inadequate training, resources, and skills, particularly in operating gadgets like braille machines and use of sign language in communication.

**Discussion.** Professional training workshops, co-teaching models, and Professional Learning Communities (PLCs) were identified as solutions to build educators' capacity. These mechanisms enable collaborative learning, improve teaching strategies, and promote inclusivity by addressing diverse learner needs.

**Conclusion.** The study concluded to underscore the importance of equipping educators with practical skills and adequate resources to create a conducive teaching and learning, inclusive classroom environment.

**Keywords:** attitudes, collaborative learning, competencies, co-teaching, knowledge, skills.

**Метою** дослідження було вивчення проблем, пов'язаних із навичками, яких бракує освітянам в умовах інклюзивної освіти в Південній Африці, зокрема в окрузі Табо Мофутсаньяна.

**Методологія.** Дані, що ґрунтувалися на якісних методах, було зібрано шляхом напівструктурованих інтерв'ю з директорами шкіл, освітянами – членами Комітету шкільної групи підтримки (SBST), посадовими особами округу – членами Окружної групи підтримки (DBST), головами шкільних керівних органів (SGB), а також завдяки аналізу документів освітньої політики, зокрема «Білої книги з питань освіти 6» (EWP6).

**Результати** дослідження показали, що освітяни стикаються з труднощами у підтримці учнів з особливими освітніми потребами (SEN) через недостатню підготовку, обмежені ресурси та брак навичок, особливо під час роботи з такими засобами, як шрифт Брайля, або у використанні жестової мови під час спілкування.

**Дискусія.** Професійні навчальні семінари, моделі спільного навчання та професійні навчальні спільноти (ПНС) було визначено як засоби розвитку потенціалу освітян. Ці механізми сприяють колегіальному навчанню, удосконалюють стратегії викладання та підтримують розвиток інклюзивної освіти з урахуванням різноманітних потреб учнів.

**Висновки.** У дослідженні наголошується на важливості забезпечення освітян практичними навичками та належними ресурсами для створення сприятливого інклюзивного середовища викладання й навчання в класі.

**Ключові слова:** ставлення, спільне навчання, компетенції, спільне викладання, знання, навички.

**INTRODUCTION**

Inclusive education, as defined by Moriña (2017), is an educational framework that ensures all learners, regardless of their abilities or backgrounds, can participate in schooling as equally valued members of the school community. It is both a process and a belief system that seeks to address exclusionary practices (Agbenyega, 2007), while

promoting equity and social justice as fundamental human rights (European Agency for Development in Special Needs Education, 2012; Forlin, 2013).

Despite the positive strides towards the practical implementation of inclusive education, particularly at primary and secondary levels, challenges remain persistent notwithstanding global efforts such as the Salamanca Statement which emphasised the need for schools to accommodate all children, (UNESCO, 1994; Anastasiadou, 2016). Educators are often ill-prepared to manage the complexities of inclusive classrooms, which impedes the achievement of inclusive education's goals.

In many African countries, including South Africa, the implementation of inclusive education is marred by numerous challenges, the majority being issues related to educators' skills and preparedness. It has been observed that educators frequently lack the training, knowledge, and support necessary to identify and accommodate the diverse needs of learners with special education needs (LSEN) (Arrah & Swain, 2014; Kuyini & Desai, 2007; Botha, 2020).

In South Africa, efforts to promote inclusion through policies such as the Education White Paper 6 (EWP6) and the South African Schools Act (1996) have been dented by persistent barriers, including inadequate resources, poor curriculum adaptation, and educators' inability to cope with the demands of inclusive classrooms (Mnguni, 2017; Adewumi et al., 2020). For instance, a study in the Amathole District revealed that educators' lack of skills and inappropriate teaching strategies contributed to poor academic performance among LSEN, with learners achieving only 28% in languages and 30% in mathematics (Adewumi et al., 2020).

In most South African schools, educators bemoan bearing overwhelming workloads and the inability to meet the technical demands associated with inclusive education, such as classroom documentation and curriculum differentiation (Mnguni, 2017). These challenges highlight a critical skills gap that hampers the effective implementation of inclusive education and further exacerbates inequalities in educational outcomes. This study sought to explore the specific skills-related challenges educators face in the Thabo Mofutsanyana District and to propose strategies for equipping them for effective management of inclusive and equitable learning environments. This study sought to contribute to the broader objective of promoting an education system that accommodates and values all learners by addressing these skills-related gaps.

#### – **Skills-related challenges educators face in implementing inclusive education**

Educators encounter a myriad of skills-related challenges in implementing inclusive education, particularly when addressing the diverse needs of learners with special education needs (LSEN). It has been observed that educators often feel unprepared and overwhelmed in inclusive classrooms due to inadequate training in curriculum differentiation, teaching strategies, and assessment methods (Avramidis, 2000). Many educators struggle to create inclusive learning environments that accommodate learners with disabilities, such as visual and hearing impairments or dyslexia, due to insufficient knowledge and resources (Annie et al., 2015; Maguvhe, 2015).

For example, educators in mainstream schools often lack the skills to adjust teaching methods and materials for learners with visual impairments (LVIs), resulting in poor classroom participation and academic performance (Ramrathan & Mzimela, 2016). Similarly, educators face challenges in modifying curricula and providing adequate support for learners with hearing impairments (LHIs), which leads to their marginalisation in regular classrooms (Musengi et al., 2012). These gaps in skills and

knowledge not only hinder the effective implementation of inclusive education but also contribute to negative attitudes and misconceptions about LSEN among educators (Ndou, 2015).

In South Africa, contextual factors such as congested classrooms, lack of assistive devices, and inadequate training programs further aggravate these challenges (Engelbrecht et al., 2015; Landsberg et al., 2011). Many educators consider themselves inadequately trained and lacking support when teaching students with complex needs, such as autism spectrum disorder (ASD) or dyslexia, since these conditions demand specialised instructional approaches and therapeutic interventions (Sefotho et al., 2021; Mpu et al., 2021).

The absence of professional development opportunities and limited support from the Department of Education (DoE) further undermines educators' confidence and ability to promote inclusive learning environments (Ahmadi et al., 2013). Additionally, the traditional medical model of education, which focuses on learners' deficits, continues to influence educators' beliefs and practices, perpetuating exclusionary attitudes (Swart & Pettipher, 2016). Addressing these skills-related challenges is critical for enabling educators to meet the diverse needs of learners in inclusive settings and for achieving the broader goals of equitable and inclusive education.

– **Strategies and support mechanisms that can enhance educators' competencies and effectiveness in managing inclusive education environments.**

The Education White Paper 6 (EWP6) highlights the need for an education system that accommodates all learners by adapting structures, curricula, pedagogy, and environments to respect differences such as age, language, and disability (Forlin et al., 2015). One key strategy is curriculum training, which equips educators with the abilities to differentiate and modify the curriculum to meet diverse learners' needs (Dalton et al., 2012; Brody & Mills, 1997).

Professional capacitation workshops can help educators develop flexible teaching strategies, enhance facilitation skills, and create enriched learning experiences for learners with special education needs (LSEN) (Adewumi et al., 2017). These workshops also increase educators' confidence and morale, thus enabling them to address linguistic barriers, behavioural challenges, and learning difficulties more effectively (Mfuthwana & Dreyer, 2018). Educators can tailor instructional approaches to capitalise on learners' strengths, improving academic outcomes and fostering inclusivity by focusing on curriculum differentiation and professional development.

Collaboration and teamwork further enhance the implementation of inclusive education by adopting a unified approach among educators, school management, and stakeholders. Studies suggest that inclusive education flourishes in environments where role-players work together to create supportive and flexible learning systems (Walton, 2011). Professional support mechanisms, such as task forces, co-teaching, and management assistance, can motivate educators and build their capacity to teach learners of all abilities effectively (Ramrathan & Mzimela, 2016).

Additionally, training in life skills, communication techniques, and multidisciplinary work can help educators address the social, emotional, and behavioral needs of LSEN, especially learners with autism spectrum disorder (ASD) and other disabilities (Donohue et al., 2014; Mosher & Carreon, 2021). Educators can develop the competencies needed to manage inclusive classrooms by combining curriculum

adaptation, professional training, and collaborative efforts, thereby creating equitable learning environments where all learners can flourish.

So, the study **aims** to explore skills-related challenges faced by educators in inclusive education environments in South Africa, focusing on the Thabo Mofutsanyana District.

## **METHODOLOGY**

An interpretive paradigm and a qualitative research approach were adopted for this study. The interpretive paradigm focuses on exploring how individuals construct meaning within their social contexts, making it suitable for examining educators' subjective experiences and perspectives (Antwi & Hamza, 2015). The qualitative approach enabled an in-depth exploration of the participants' lived experiences, with data collected in their natural settings to enhance authenticity and credibility (Rossman & Rallis, 2019). A multiple case study design was employed to provide a detailed analysis of inclusive education practices in three mainstream public schools. This design was chosen for its descriptive and holistic nature, which allows for a holistic understanding of how educators perceive the skills-related challenges in inclusive classrooms (Hamilton & Corbett-Whittier, 2014).

The study utilised purposive sampling to select 12 participants, including three principals, three School-Based Support Team (SBST) members, three School Governing Body (SGB) members, and three District-Based Support Team (DBST) officials, all of whom were knowledgeable about inclusive education. Data collection involved in-depth interviews, which provided rich qualitative data, and document analysis to validate and triangulate findings.

Open-ended questions were used in interviews to allow participants to share their experiences freely. At the same time, relevant policy documents, such as the Education White Paper 6 (EWP6) and school-level policies, were analysed to contextualise findings. Data analysis followed Creswell's (2012) six-step process, which included transcription, coding, and thematic analysis to identify patterns and themes. To ensure trustworthiness, the study adhered to credibility, dependability, transferability, and confirmability by employing triangulation, thick descriptions, and maintaining audit trails. Ethical considerations such as informed consent, confidentiality, and anonymity were carefully observed to protect participants' rights and privacy throughout the research process.

## **RESULTS**

### **Challenges Educators Encounter in the Implementation of Inclusive Education**

The study identified several challenges educators face in implementing inclusive education, primarily due to inadequate knowledge, skills, and support. These challenges are summarised below:

#### **1. Inability to Use Sign Language**

Educators struggle to accommodate Learners with Hearing Impairments (LHIs) due to inadequate training in sign language. Participants noted:

*"Most educators here are not adequately trained to use sign language to actively engage these learners" (Educator 3).*

*Educators often teach as though all learners are the same, leaving LHIs isolated and struggling academically, which lowers their self-esteem (District Official 2).*

The lack of sign language training leaves LHIs excluded from classroom engagement, negatively affecting their academic performance and self-esteem.

## 2. Inability to Operate Braille

Educators lack the training to operate, read, or interpret braille, making it difficult to include Learners with Visual Impairments (LVIs) in classroom activities. Participants cited:

*"I find it very difficult to accommodate LVIs as I have never received any intensive training to operate braille and sign language" (Educator 1).*

*Educators cannot operate braille in order to teach LVIs (Principal 2).*

*In my school as a Full Service School I have learners who are visually mixed with learners who are normal and educators as when they deliver a lesson, LVIs are left behind because educators struggle to accommodate them in a lesson (Principal 3).*

Without adequate training in braille, educators are unable to effectively support LVIs, leaving them behind in academic activities.

## 3. Insufficient Learning and Teaching Support Materials (LTSM)

Schools lack adequate teaching resources to engage diverse learners effectively. Examples include:

*Dyslexic learners are also a challenge because of time and we are used to teacher-centred approach which only accommodates gifted learners yet dyslexic learners need posters as they learn through seeing objects or pictures which are not enough for all learning areas (Educator 1).*

*The challenge that I have noticed is that the school does not enough have braille machines so that more learners can be assisted (Educator 2).*

The absence of adequate learning materials, such as braille machines and visual aids, hinders the academic success of learners with special needs, particularly dyslexic learners and LVIs.

## 4. Overcrowded Classrooms

Overcrowded classrooms hinder educators' ability to provide individual attention to learners, particularly those with special needs. Participants stated:

*Our classes are overcrowded, and you can't assign them any individual attention (Educator 1).*

*It is unfortunate that educators' teaching time is being used for administrative work and many of them sit with overcrowded classrooms. Some educators have no space to move around and assist the learners (Principal 1).*

Overcrowded classrooms prevent educators from providing individual attention, creating an unsupportive environment for learners with unique needs.

## 5. Inability to Utilise Differentiated Approaches

Educators struggle to implement differentiated teaching methods due to a lack of training in inclusive education strategies. Issues include:

*Most educators struggle to use differentiated approach methods to cater for all learners in an inclusive environment, especially accommodating learners who*

*are deaf. Most educators cannot teach using sign language as they are not adequately trained to use sign language (Principal 3).*

*In my teaching qualification I did not study about braille remedial teaching, again DoE has not yet provided adequate training hence it poses a lot of frustration when I have to teach learners who are having such barriers to learning (Educator 3).*

The failure to implement differentiated teaching methods due to a lack of training marginalises learners with special needs, such as LHIs and LVIs, in inclusive classrooms.

### **Strategies for Capacitating Educators to Handle Learners with Learning Needs in Inclusive Classrooms**

The study highlighted that the effective implementation of inclusive education is hindered by inadequate training for educators, especially in semi-urban schools receiving government grants. To address this, the following strategy was identified:

#### **1. Workshops**

Frequent workshops are critical to capacitate educators, particularly in operating and interpreting braille machines, which are essential for supporting Learners with Visual Impairments (LVIs). A participant emphasized:

*Frequent workshops will help us a lot and will also serve as a motivation. In my school educators struggle a lot in operating braille machines. This means that educators in my school need to be capacitated to interpret braille and to operate braille machine so as to effectively LVIs, (Principal 2).*

Workshops would empower educators to improve their teaching practices, ensuring LVIs are fully included in the learning process.

#### **2. Training**

Participants emphasized the importance of training educators in reading and using sign language to effectively engage LHIs in inclusive classrooms. A participant noted:

*Educators must also be trained to use sign language alphabets so as to be able to engage LHIs in a normal classroom. Educators struggle a lot to deliver an effective lesson using a sign language (Principal 3).*

Additionally, co-teaching was highlighted as a beneficial strategy, where a general educator collaborates with a specialized educator to plan and implement lessons. This approach ensures that while one educator presents the lesson, the other interprets using sign language, enabling meaningful instruction for learners with diverse needs.

#### **3. Professional Learning Communities (PLCs)**

Participants emphasized the importance of establishing Professional Learning Communities (PLCs) to enable educators in inclusive education to share knowledge and best practices. A participant stated:

*Most educators lack knowledge about inclusive education. The Department of Basic Education must train more remedial educators and provide support full-service schools with all the necessary resources that will be useful to learners. Educators must also be capacitated to use digital devices in their classroom through PLC, because educators learn best when they are sharing knowledge (Educator 1).*

*Educators must establish PLCs whereby they will be sharing best practices among themselves as to how best they plan a lesson for diverse learners in an inclusive education environment (District Official 3).*

PLCs would allow educators to learn collaboratively, including how to plan lessons for diverse learners and use digital devices effectively. This peer-sharing approach would enhance teaching practices and support the successful implementation of inclusive education, enabling all learners to reach their full potential.

#### **4. Mentorship Programs**

The study highlighted the importance of mentorship programs to help educators plan differentiated lessons that address diverse learning needs in inclusive classrooms. Participants emphasized:

*The educator needs to know his or her clientele and that will help them to be mentored on how to prepare a differentiated lesson plan in order to address different learning styles in an inclusive environment (District Official, 1).*

*Educators must also be knowledgeable of Bloom Taxonomy and it must be taken into consideration when preparing formative and summative assessments. This will help educators to reach each learners ability. Educators need to be mentored in setting standardised question papers (District Official 2).*

Mentorship programs would provide educators with guidance, support, and expertise from specialists, enhancing their ability to engage all learners and foster both personal and professional growth.

#### **5. Access to Resources and Information**

Participants emphasized the need for adequate resources to effectively implement inclusive education.

*Schools must have enough resources such as braille machines, sign language charts and computer labs (District Official 3).*

Access to adequate resources and training is essential for creating inclusive and supportive learning environments.

### **DISCUSSION**

#### **– Skills-related challenges educators face in implementing inclusive education**

The findings highlight several challenges educators face in implementing inclusive education (Dovzhenko, 2022; Kazachiner, 2020), primarily due to insufficient support and inadequate skills.

District Official 1 noted, *“Educators are having a difficult time accommodating learners with and without barriers to learning in a regular classroom because they are not adequately equipped with necessary skills to teach in an inclusive environment”*. Phiri (2021) supports this by emphasising that the lack of practical assistance leaves educators frustrated and unable to carry out their roles effectively.

Mariga (2014) adds that successful inclusion depends on educators being well-prepared and empowered with the necessary skills. Additionally, disparities in training quality aggravate the problem, leaving many educators unprepared for tasks such as curriculum modification or using specialised tools like braille and sign language. Principal 1 remarked, *“Educators lack skills to operate braille and even sign language”*.

This lack of preparation impedes their ability to meet the needs of all learners in the classroom.

The findings further highlight gaps in resources and training for inclusive education. Molakeng (2019) argues that inclusive learning environments require access to Learning and Teaching Support Materials (LTSM), assistive devices like hearing aids and magnifying glasses, and flexible teaching methods, along with proper training for educators to use these tools effectively.

While some efforts, such as providing hearing aids for learners with hearing impairments, have been made, educators' lack of sign language skills often leaves these learners excluded from the day-to-day interactive engagements within the classroom. Vygotsky's Sociocultural Theory underscores the importance of educators guiding learners through their Zone of Proximal Development (ZPD), however, without inclusive surroundings and skilled teachers, this process is thwarted, thus threatening the success of inclusive education initiatives (Molakeng, 2019; Kern et al., 2015).

– **Strategies and support mechanisms that can enhance educators' competencies and effectiveness in managing inclusive education environments.**

The findings reveal the importance of relevant training to improve educators' skills in managing inclusive classrooms. Many educators find it difficult to support learners with visual and hearing impairments (LVIs and LHIs) due to a lack of experience with tools like braille machines and sign language. Principal 1 stated, "*Educators struggle a lot to deliver an effective lesson using sign language*", while Principal 2 remarked, "*In my school, educators struggle a lot in operating braille machines*".

District Official 1 highlighted the need for lesson plans that serve all learners, regardless of their barriers to learning. Research indicates that professional training workshops can be an effective way to equip educators with the skills and adaptability needed to meet diverse student needs (Dukmak, 2013; Nel et al., 2014). These workshops can empower educators, making them better prepared to engage learners with special education needs (Sharma et al., 2012).

Participants also proposed co-teaching as another effective strategy for building educator capacity in inclusive education environments. This approach involves collaboration between subject teachers and special education teachers in planning, delivering, and evaluating lessons. Participants acknowledged that observing and learning from colleagues during co-teaching sessions could improve their teaching practices. Principal 2 stated, "*Educators need to be capacitated to operate braille machines to effectively engage LVIs, and that can be done through co-teaching*".

Research supports this model of teaching by highlighting various co-teaching methods, such as station teaching, parallel teaching, and team teaching, which allow educators to share responsibilities and learn from each other (Friend & Cook, 2016). Co-teaching not only enhances professional growth and job satisfaction but also benefits learners, particularly LSEN, by providing tailored instructional adaptations that improve their academic performance and self-confidence (Pancsofar & Petroff, 2013).

Professional Learning Communities (PLCs) were identified as a promising mechanism for promoting collaboration and continuous professional development among educators. Educator 1 noted, "*Educators must also be capacitated to use digital devices in their classrooms through PLCs because educators learn best when they are sharing knowledge.*" PLCs promote collective learning, where educators and school administrators collaborate to enhance their skills and improve learner outcomes (Ning

et al, 2015). Research has shown that PLCs can lead to improved teaching practices, greater companionship among educators, and a shared sense of ownership in professional development initiatives (Priestley, 2011). PLCs can strengthen educator effectiveness and positively impact learner performance by creating a culture of continuous inquiry and improvement.

## **CONCLUSION**

In conclusion, this study highlights the ongoing skills-related challenges that educators face when implementing inclusive education, especially in meeting the diverse needs of learners with special educational needs (LSEN). The findings emphasise the vital need to equip educators with targeted training, resources, and support systems to improve their skills and effectiveness. Strategies such as professional training workshops, co-teaching models, and Professional Learning Communities (PLCs) were identified as key methods to foster collaboration, enhance teaching practices, and empower educators to develop inclusive learning environments. Addressing these gaps is crucial to ensuring that inclusive education transitions from policy to practice, creating equitable opportunities and meaningful participation for all learners in South Africa's education system.

## **RECOMMENDATIONS**

The study made the following recommendations:

1. Educators should attend regular workshops focused on inclusive education strategies, including operating braille machines, using sign language, and applying multisensory teaching approaches.
2. Implement mentorship programs where experienced educators or specialists guide teachers in preparing differentiated lesson plans and assessments that cater for the diverse learning needs.
3. Encourage educators to form PLCs to share best practices, collaborate on lesson planning, and learn effective methods for inclusive teaching.
4. Schools should be equipped with essential tools such as braille machines, sign language charts, and teaching aids. The Department of Education must ensure sufficient funding to provide these resources.
5. Introduce a co-teaching model where general and specialized educators collaborate in classrooms to deliver lessons effectively, particularly for learners with visual or hearing impairments.

---

## **ACKNOWLEDGEMENTS**

Funding was provided by the *Central University of Technology*, Free State for a Master's in Education research study.

---

## **CONFLICT OF INTERESTS**

The authors declare that there are no conflicts of interest regarding the publication of this paper.

## **FUNDING**

The authors declare that the study received financial support from the *Central University of Free State*, South Africa.

## REFERENCES

- Adewumi, T. M., Mosito, C., & Agosto, V. (2019). Experiences of teachers in implementing the inclusion of learners with special education needs in selected Fort Beaufort District primary schools, South Africa. *Cogent Education*, 6(1), 1–20. <https://doi.org/10.1080/2331186X.2019.1703446>
- Adewumi, T. M., Mosito, C., & Agosto, V. (2019). Experiences of teachers in implementing inclusion of learners with special education needs in selected Fort Beaufort District primary schools, South Africa. *Cogent Education*, 6(1). <https://doi.org/10.1080/2331186x.2019.1703446>
- Adewumi, T. M., Rembe, S., & Mncube, V. (2020). Assessment strategies adapted for implementing inclusion of learners with special education needs in selected primary schools in the Amathole West District, South Africa. *Journal of Human Ecology*, 71(1–3), 147–153. <https://doi.org/10.31901/24566608.2020/71.1-3.3175>
- Adewumi, T. M., Rembe, S., Shumba, J., & Akinyemi, A. (2017). Adaptation of the curriculum for the inclusion of learners with special education needs in selected primary schools in the Fort Beaufort District. *African Journal of Disability*, 6, a377. <https://doi.org/10.4102/ajod.v6i0.377>
- Agbenyega, J. (2007). Examining teachers' concerns and attitudes to inclusive education in Ghana. *International Journal of Whole Schooling*, 3(1), 41–56. <https://www.researchgate.net/publication/252491664>
- Anastasiadou, E. (2016). *Teacher's attitudes towards inclusion and the inclusion of students with emotional and behavioural disorders* [Master's thesis, University of Jyväskylä]. University of Jyväskylä Repository. <https://urn.fi/URN:NBN:fi:ju-201606153084>
- Annie, P., Ndhlovu, D., & Kasonde-Ng'andu, S. (2015). The challenges in teaching learners with visual impairment in Zambia. *International Journal of Multidisciplinary Research and Development*, 2, 157–166. <https://www.researchgate.net/publication/324133431>
- Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical perspective. *European Journal of Business and Management*, 7(3), 217–225. <https://www.researchgate.net/publication/295087782>
- Arrah, R., & Swain, K. (2014). Teachers' perceptions of students with special education needs in Cameroon secondary schools. *International Journal of Special Education*, 29(3), 101–110. <https://files.eric.ed.gov/fulltext/EJ1045965.pdf>
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A Survey into Mainstream Teachers' Attitudes Towards the Inclusion of Children with Special Educational Needs in the Ordinary School in one Local Education Authority. *Educational Psychology*, 20(2), 191–211. <https://doi.org/10.1080/713663717>
- Botha, C. (2020). The impact of the apprenticeship of observation on preservice teachers' perceptions of teaching. *Journal of Education*, 81, 50–64. <https://doi.org/10.17159/2520-9868/i81a03>
- Brody, L. E., & Mills, C. J. (1997). Gifted Children with Learning Disabilities: A Review of the Issues. *Journal of Learning Disabilities*, 30(3), 282–296. <https://doi.org/10.1177/002221949703000304>

- Brookhart, S. M. (2011). Educational assessment knowledge and skills for teachers. *Educational Measurement Issues and Practice*, 30(1), 3–12. <https://doi.org/10.1111/j.1745-3992.2010.00195.x>
- Dalton, E. M., Mckenzie, J. A., & Kahonde, C. (2012). The implementation of inclusive education in South Africa: Reflections arising from a workshop for teachers and therapists to introduce Universal Design for Learning. *African Journal of Disability*, 1(1), Article 13. <https://doi.org/10.4102/ajod.v1i1.13>
- Donohue, D., & Bornman, J. (2014). The challenges of realising inclusive education in South Africa. *South African Journal of Education*, 34(2), 1–14. <https://doi.org/10.15700/201412071114>
- Dovzhenko, T. (2022). Inclusive Education Implementation: The Experience of the Faculty of Primary Education. *Educational Challenges*, 27(1), 67-79. <https://doi.org/10.34142/2709-7986.2022.27.1.06>
- Dukmak, S.J. (2013). Regular classroom teachers' attitudes towards including students with disabilities in the regular classroom in the United Arab Emirates. *The Journal of Human Resource and Adult Learning*, 9(1), 26–38. <https://www.researchgate.net/publication/272748089>
- Engelbrecht, P., Nel, M., Smit, S., & Van Deventer, M. (2015). The idealism of education policies and the realities in schools: the implementation of inclusive education in South Africa. *International Journal of Inclusive Education*, 20(5), 520–535. <https://doi.org/10.1080/13603116.2015.1095250>
- European Agency for Development in Special Needs Education. (2012). *Key principles for promoting quality in inclusive education: Recommendations for policy makers*. European Agency for Development in Special Needs Education. [https://www.european-agency.org/sites/default/files/key-principles-for-promoting-quality-in-inclusive-education\\_key-principles-EN.pdf](https://www.european-agency.org/sites/default/files/key-principles-for-promoting-quality-in-inclusive-education_key-principles-EN.pdf)
- Forlin, C., Sharma, U., Loreman, T., & Sprunt, B. (2015). Developing disability-inclusive indicators in the Pacific Islands. *Prospects*, 45(2), 197–211. <https://doi.org/10.1007/s11125-015-9345-2>
- Forlin, C., Sin, K. K.-F., & Maclean, R. (2013). Transition for a student with special educational needs from primary to secondary school in Hong Kong. *Australasian Journal of Special Education*, 37(1), 49–63. <https://doi.org/10.1017/jse.2013.8>
- Hamilton, L., & Corbett-Whittier, J. (2014). *Using case study in education research*. SAGE Publications. <https://doi.org/10.4135/9781473913851>
- Kazachiner, O. (2020). Developing Philology Teachers' Inclusive Competence in Postgraduate Education. *Educational Challenges*, 25(1), 31–45. <https://doi.org/10.34142/2709-7986.2020.25.1.03>
- Kern, A., Amod, Z., Seabi, J., & Vorster, A. (2015). South African Foundation Phase Teachers' perceptions of ADHD at private and public schools. *International Journal of Environmental Research and Public Health*, 12(3), 3042–3059. <https://doi.org/10.3390/ijerph120303042>
- Kuyini, A. B., & Desai, I. (2007). Principals' and teachers' attitudes and knowledge of inclusive education as predictors of effective teaching practices in Ghana. *Journal of Research in Special Educational Needs*, 7(2), 104–113. <https://doi.org/10.1111/j.1471-3802.2007.00086.x>

- Landsberg, E., Krüger, D., & Swart, E. (Eds.). (2011). *Addressing barriers to learning: A South African perspective* (2nd ed.). Van Schaik Publishers.
- Maguvhe, M. (2015). Inclusive education: A transformation and human rights agenda under spotlight in South Africa. *African Journal of Disability*, 4(1), Article N° 183. <https://doi.org/10.4102/ajod.v4i1.183>
- Mariga, L. (2014). *Inclusive education; Teachers' Guidelines on How to Interact with and Support Learners with Disabilities*. Lesotho Government Publishers.
- Mfuthwana, T., & Dreyer, L. M. (2018). Establishing inclusive schools: Teachers' perceptions of inclusive education teams. *South African Journal of Education*, 38(4), 1–10. <https://doi.org/10.15700/saje.v38n4a1703>
- Mnguni, M. A. (2017). *From inclusive education policy to implementation: A case study of a full-service school in Umngeni District, KwaZulu-Natal, South Africa* [Master's dissertation, University of KwaZulu-Natal]. University of KwaZulu-Natal ResearchSpace. <https://researchspace.ukzn.ac.za/handle/10413/16942>
- Molakeng, M. (2019). *Factors affecting the implementation of inclusive education practices in selected secondary schools in the Omaheke Region* [Master's thesis, University of Namibia]. University of Namibia Repository. <http://hdl.handle.net/11070/2579>
- Moriña, A. (2016). Inclusive education in higher education: challenges and opportunities. *European Journal of Special Needs Education*, 32(1), 3–17. <https://doi.org/10.1080/08856257.2016.1254964>
- Mosher, M. A., & Carreon, A. C. (2021). Teaching social skills to students with autism spectrum disorder through augmented, virtual and mixed reality. *Research in Learning Technology*, 29, 2626. <https://doi.org/10.25304/rlt.v29.2626>
- Mosolla, L. L. (2020). *Enhancing teachers' self-efficacy for supporting visually impaired learners in Lesotho schools through school support network* [Master's thesis, University of the Free State]. University of the Free State Repository. <http://hdl.handle.net/11660/11221>
- Mpu, Y., & Adu, E. O. (2021). The challenges of inclusive education and its implementation in schools: The South African perspective. *Perspectives in Education*, 39(2), 225–238. <https://doi.org/10.18820/2519593x/pie.v39.i2.16>
- Musengi, M., & Chireshe, R. (2012). Inclusion of deaf students in mainstream rural primary schools in Zimbabwe: challenges and opportunities. *Studies of Tribes and Tribals*, 10(2), 107–116. <https://doi.org/10.1080/0972639x.2012.11886648>
- Ndou, N. (2015). *Managing the implementation of education policies for quality education in public schools of Limpopo Province* [Doctoral dissertation, University of South Africa]. Semantic Scholar. <https://api.semanticscholar.org/CorpusID:156410451>
- Nel, M., Engelbrecht, P., Nel, N., & Tlale, D. (2013). South African teachers' views of collaboration within an inclusive education system. *International Journal of Inclusive Education*, 18(9), 903–917. <https://doi.org/10.1080/13603116.2013.858779>
- Ning, H. K., Lee, D., & Lee, W. O. (2015). Relationships between teacher value orientations, collegiality, and collaboration in school professional learning communities. *Social Psychology of Education*, 18(2), 337–354. <https://doi.org/10.1007/s11218-015-9294-x>

- Pancsofar, N., & Petroff, J. G. (2013). Professional development experiences in Co-Teaching. *Teacher Education and Special Education the Journal of the Teacher Education Division of the Council for Exceptional Children*, 36(2), 83–96. <https://doi.org/10.1177/0888406412474996>
- Pettipher, R., & Swart, E. (2016). A conceptual foundation for grasping inclusion. In E. Landsberg, D. Kruger, & E. Swart (Eds.), *Addressing barriers to learning* (pp. 3–27). Van Schaik. <https://www.vanschaiknet.com/catalogue/addressing-barriers-to-learning/>
- Phiri, P. P. (2021). *Teachers' experiences of implementing inclusive education in mainstream secondary schools in Hhohho region, Eswatini (Swaziland)* [Master's thesis, University of South Africa]. UNISA Institutional Repository. <https://hdl.handle.net/10500/28693>
- Priestley, M., Miller, K., Barrett, L., & Wallace, C. (2010). Teacher learning communities and educational change in Scotland: the Highland experience. *British Educational Research Journal*, 37(2), 265–284. <https://doi.org/10.1080/01411920903540698>
- Ramrathan, L., & Mzimela, J. (2016). Teaching reading in a multi-grade class: Teachers' adaptive skills and teacher agency in teaching across grade R and grade 1. *South African Journal of Childhood Education*, 6(2), 1–8. <https://doi.org/10.4102/sajce.v6i2.448>
- Rossmann, G. B., & Rallis, S. F. (2019). *An introduction to qualitative research: Learning in the field* (5<sup>th</sup> ed.). SAGE Publications. <https://doi.org/10.4135/9781071802694>
- Sefotho, M. M., & Onyishi, C. N. (2021). In-school transition challenges among primary school learners with autism spectrum disorders in South Africa: Parents and teachers' perspectives. *Perspectives in Education*, 39(2), 283–302. <https://doi.org/10.18820/2519593x/pie.v39.i2.20>
- Sharma, U., Loreman, T., & Forlin, C. (2011). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12(1), 12–21. <https://doi.org/10.1111/j.1471-3802.2011.01200.x>
- Swart, E., & Pettipher, R. (2016). A conceptual foundation for understanding inclusion. In E. Landsberg, D. Krüger, & E. Swart (Eds.), *Addressing barriers to learning: A South African perspective* (pp. 3-27). Van Schaik Publishers.
- UNESCO. (1994). *The Salamanca statement and framework for action on special needs education*. UNESCO. <https://www.european-agency.org/sites/default/files/salamanca-statement-and-framework.pdf>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press. <https://doi.org/10.2307/j.ctvjf9vz4>
- Walton, E. 2011. Getting inclusion right in South Africa. *Intervention in School and Clinic*, 46(4), 240–245. <https://doi.org/10.1177/1053451210389033>
- Woolfolk, A. (2013). *Educational psychology* (11th ed.). Pearson Education.