Advancing Inclusive Education in Higher Education: Challenges and Opportunities in Preparing Pre-Service Teachers to Support Students with Disabilities

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Purpose: This study aims to explore the integration of inclusive education for students with disabilities in higher education, with a specific focus on how pre-service teacher training curricula address this critical issue. It seeks to identify the challenges universities face in supporting students with disabilities and to examine the role of teacher education in advancing inclusive practices.

Study design/methodology/approach: A scoping review methodology was adopted, analysing literature published between 2000 and 2024. The review draws on a diverse range of academic sources to assess the state of inclusive education in higher education, particularly in relation to teacher training programmes.

Findings: The study reveals that, despite significant global progress in fostering inclusive learning environments, substantial gaps persist in preparing teachers to meet the needs of diverse learners. These shortcomings are often attributed to the inadequate emphasis on inclusive pedagogies in pre-service teacher training and insufficient institutional support structures for students with disabilities. The findings highlight the necessity for continuous professional development for educators and robust, accessible support systems within institutions.

Originality/value: This review underscores the importance of revising pre-service teacher education programmes to embed inclusive education more comprehensively. It offers practical recommendations, including enhancing collaboration between educators and disability support services and fostering greater institutional commitment to inclusivity. By addressing these areas, higher education institutions can better prepare future teachers to support the diverse needs of students with disabilities, contributing to the development of genuinely inclusive learning environments.

Introduction

Inclusive education is foundational for fostering equitable learning environments where students from all backgrounds, including those with disabilities, can thrive (Ajani & Ntombela, 2024). In higher education, where diversity is increasing, this principle becomes even more critical. However, while inclusive education policies have advanced globally, the implementation of these policies remains inconsistent, particularly in low- and middle-income countries (Louw & Wessels, 2019). Effective inclusion requires a transformative shift beyond policy adoption to changes in institutional practices, curricula, and support systems, as highlighted by Florian and Spratt (2013). This transformation is especially challenging in contexts with limited resources or where institutional cultures do not prioritise inclusivity (Mthethwa, 2020).

Central to achieving inclusivity in higher education is the preparation of pre-service teachers. Teacher education programmes play a pivotal role in equipping future educators with the knowledge, attitudes, and skills needed to address the diverse needs of learners (Govender & Ajani, 2021). However, numerous studies indicate that these programmes often inadequately address the practical challenges of supporting students with disabilities. For instance, Sharma

et al. (2018) found that while many pre-service teachers hold positive attitudes toward inclusion, they frequently lack the confidence and competencies necessary to implement inclusive practices effectively. This gap between theoretical training and practical application is further compounded by limited opportunities for experiential learning, as noted by Forlin et al. (2009), and insufficient integration of inclusive pedagogies into teacher education curricula (Ndlovu & Mavundla, 2020).

Despite growing awareness, many higher education institutions struggle to provide the infrastructure and resources needed for inclusive learning environments. Research by Davids (2022) and Mothibeli and Nkosi (2023) highlights how limited access to assistive technologies, inaccessible learning materials, and weak institutional support systems exacerbate barriers for students with disabilities. These shortcomings not only hinder the academic success of these students but also perpetuate exclusionary practices. Additionally, attitudes of educators and institutional culture play significant roles in shaping inclusive practices. Ajani and Govender (2021) argue that teacher attitudes are shaped by training, institutional ethos, and experiences with inclusive education, underscoring the importance of comprehensive and sustained professional development.

Collaboration between educators, disability support staff, and policymakers is essential for addressing these challenges. A whole-institution approach, as advocated by Farrell and Ainscow (2019), ensures that students with disabilities are not merely accommodated but actively included in all facets of university life. Institutions must also adopt more flexible, student-centred approaches to teaching, as rigid curricula and inaccessible environments often exclude students with disabilities (Slee, 2018). Building on these insights, Kriel and Steyn (2022) emphasise the need for systemic curriculum reforms that prioritise inclusivity and embed inclusive pedagogies across all teacher education programmes.

Inclusive education benefits not only students with disabilities but also the broader learning community. Research by Hehir et al. (2016) shows that inclusive classrooms promote diversity, empathy, and innovative teaching practices, ultimately improving outcomes for all students. However, realising these benefits requires higher education institutions to make a sustained commitment to inclusivity. This involves not only strengthening pre-service teacher training but also enhancing institutional support systems, integrating assistive technologies, and fostering a culture that values diversity and inclusion (Gcabashe & Mthethwa, 2023).

This study seeks to address these critical issues by examining the state of inclusive education in higher institutions, with a focus on pre-service teacher training and institutional support for students with disabilities. Drawing on a comprehensive scoping review of literature from 2000 to 2024, the research will identify key challenges, assess the effectiveness of existing practices, and propose actionable strategies for advancing inclusivity. By doing so, this study aims to contribute to the growing body of knowledge on inclusive education and offer practical recommendations for policy and practice in higher education globally.

Theoretical Framework

The theoretical framework of this study is anchored in two key perspectives: the sociocultural theory and the social model of disability. These frameworks provide valuable insights into how societal attitudes, norms, and structures shape the experiences of individuals with disabilities in higher education. By drawing on these theories, we can better understand the challenges faced by students with disabilities and the strategies that can be employed to foster inclusive environments.

Sociocultural theory, originally developed by Lev Vygotsky, emphasises the role of social interaction and cultural context in shaping human development and learning. This theory posits

that learning is a socially mediated process where individuals acquire knowledge and skills through interaction with others and the cultural tools available in their environment (Vygotsky, 1978). In the context of higher education, this means that students with disabilities are not only influenced by their individual abilities but also by the social and cultural environment in which they learn. The attitudes of peers, teachers, and the institution itself play a crucial role in shaping their educational experiences.

One of the key aspects of sociocultural theory is the concept of the "zone of proximal development" (ZPD), which refers to the range of tasks that a learner can perform with the help of more knowledgeable others, such as teachers or peers. For students with disabilities, the ZPD can be expanded through the provision of appropriate support and accommodations, enabling them to engage in tasks that they might otherwise find difficult (Cole, 2006). However, when such support is lacking, students may struggle to fully participate in academic activities, leading to feelings of exclusion and frustration.

The sociocultural perspective also highlights the importance of language and communication in learning. For students with disabilities, communication barriers can significantly hinder their ability to engage with the curriculum and interact with their peers. According to Wertsch (1991), language is not just a tool for communication but a means of shaping thought and understanding. When students with disabilities are excluded from conversations or when their needs are not adequately addressed in the classroom, they may be deprived of important opportunities for cognitive and social development.

In addition to the sociocultural perspective, the social model of disability provides a critical lens through which to examine the experiences of students with disabilities in higher education. The social model, developed in opposition to the medical model of disability, argues that disability is not an inherent characteristic of an individual but rather a result of the interaction between an individual's impairments and societal barriers (Oliver, 1990). This model shifts the focus away from the individual's impairments and towards the social, physical, and attitudinal barriers that limit their participation in society.

In higher education, the social model of disability challenges institutions to rethink their approach to accessibility and inclusion. Instead of viewing disability as a problem that resides within the individual, the social model encourages educators and policymakers to address the environmental and institutional barriers that create disadvantage (Shakespeare, 2013). For example, inaccessible buildings, inflexible teaching methods, and a lack of support services are all examples of societal barriers that can prevent students with disabilities from fully participating in academic life.

The social model also emphasises the importance of agency and empowerment for individuals with disabilities. Rather than being passive recipients of accommodations, students with disabilities should be viewed as active participants in their education, with the right to make choices about how they learn and how they are supported. This aligns with the principles of Universal Design for Learning (UDL), which advocates for flexible and inclusive teaching strategies that benefit all learners, regardless of their abilities (Meyer et al., 2014).

One of the key criticisms of the social model is that it may overlook the personal experiences of impairment and the ways in which physical and cognitive impairments can affect individuals' lives (Shakespeare, 2006). However, the social model remains a powerful tool for advocating for structural changes in higher education that can create more inclusive environments. By focusing on the removal of barriers, the social model aligns with the principles of equity and justice, ensuring that students with disabilities have the same opportunities as their non-disabled peers.

The combination of sociocultural theory and the social model of disability provides a comprehensive framework for understanding the experiences of students with disabilities in higher education. Sociocultural theory emphasises the role of social interaction, cultural tools, and communication in learning, while the social model focuses on the removal of societal barriers that limit participation. Together, these theories highlight the importance of creating inclusive environments that support the learning and development of all students.

One of the key implications of these theories is the need for teacher training and professional development. As highlighted by Florian and Black-Hawkins (2011), teachers play a critical role in shaping the learning experiences of students with disabilities. By adopting inclusive pedagogies and recognising the diverse needs of their students, educators can create classrooms that are more responsive to the individual strengths and challenges of each learner. Training that incorporates both sociocultural and social model perspectives can help teachers develop the skills and knowledge needed to support students with disabilities effectively.

Moreover, the theoretical framework suggests that inclusive education is not just about making accommodations for students with disabilities but about transforming the entire educational environment. As argued by Burgstahler (2015), inclusion requires a shift in mindset, where diversity is seen as a strength rather than a challenge. This means rethinking traditional approaches to teaching, assessment, and student support, and adopting more flexible and responsive practices that can meet the needs of all learners.

The justification for using these theoretical frameworks in this study is grounded in their ability to address both the social and structural dimensions of disability in higher education. The sociocultural theory provides a nuanced understanding of how social interactions and cultural tools shape the learning experiences of students with disabilities, while the social model of disability highlights the importance of removing societal barriers to create more inclusive environments. Together, these theories offer a holistic approach to understanding and addressing the challenges faced by students with disabilities in higher education.

By applying these frameworks, this study aims to contribute to the ongoing conversation about how to create truly inclusive educational environments. The focus is not just on accommodating individual students but on transforming higher education institutions to ensure that all students, regardless of their abilities, have equal access to learning opportunities. This theoretical foundation will guide the analysis of the data and inform the development of recommendations for improving inclusive practices in higher education.

Literature Review

The literature review serves as the foundation of any research, situating the study within the existing knowledge and highlighting gaps that warrant further investigation. This study's objectives centre on the integration of inclusive education in higher institutions and the challenges faced by students with disabilities. The following literature review is organised around the key objectives of the study: identifying barriers to inclusive education, examining support mechanisms for students with disabilities, and exploring institutional policies aimed at fostering an inclusive learning environment.

Inclusive education has gained increasing attention in higher education over the past two decades. According to UNESCO (2009), inclusion is not just about placing students with disabilities in mainstream institutions but about reshaping educational policies, practices, and cultures to ensure all students can participate fully. However, the literature reveals that while the concept of inclusion is widely endorsed, its implementation remains inconsistent across institutions (Florian & Linklater, 2010). Many universities have yet to fully adopt inclusive

practices, often due to a lack of understanding or resources, creating significant challenges for students with disabilities.

One of the most prevalent barriers to inclusive education is physical accessibility. Studies have consistently shown that inaccessible buildings and facilities hinder the participation of students with physical disabilities (Seale, 2013). Universities, particularly older ones, are often not equipped with ramps, elevators, or accessible toilets, which limits mobility and affects students' independence. Despite the growing awareness of these challenges, the literature indicates that many institutions still struggle to retrofit their campuses to meet accessibility standards (Liasidou, 2014).

Another significant barrier identified in the literature is attitudinal. Negative perceptions of disability, both from faculty and peers, can lead to social exclusion and marginalisation. Tinklin, Riddell, and Wilson (2004) found that students with disabilities often experience stereotyping and discrimination, with some faculty members viewing disability as a "problem" that needs to be "fixed." This view is counterproductive to fostering an inclusive environment, where the focus should be on adapting the environment and teaching methods to meet diverse needs. Furthermore, negative attitudes can manifest in unconscious bias, where faculty may lower their expectations of students with disabilities, leading to reduced academic support and opportunities for these students (Goode, 2007).

Technological barriers significantly impede access to inclusive education despite the transformative potential of technology to bridge gaps for students with disabilities (Seale, 2014). Many higher education institutions fail to adequately integrate assistive technologies into their learning environments, leaving students with disabilities at a disadvantage (Kelly et al., 2018). While some institutions provide basic tools such as screen readers, these efforts often fall short of addressing the broader needs of diverse learners. For instance, advanced technologies like real-time captioning systems for students with hearing impairments or eye-gaze devices for students with mobility challenges remain underutilised due to financial constraints, limited expertise, or a lack of institutional prioritisation (Fichten et al., 2009; Alper & Raharinirina, 2006). Without access to these tools, students with disabilities face significant challenges in engaging with the full curriculum, exacerbating existing educational inequalities (Zhang et al., 2020).

The absence of institutional support for implementing advanced assistive technologies further intensifies the exclusion of students with disabilities. Studies show that even when technologies are available, a lack of training for educators and support staff often renders these tools ineffective (Borg et al., 2011; Smith et al., 2019). Additionally, disparities in access to reliable internet, up-to-date software, and adaptable learning management systems highlight the digital divide, particularly in resource-constrained institutions (Zheng et al., 2018). This disconnect not only limits the effectiveness of assistive technologies but also undermines efforts to create equitable learning environments. Addressing these issues requires a systemic approach, including increased investment in technological infrastructure, comprehensive staff training, and the development of accessible content (Parette & Scherer, 2004; Florian, 2017). By prioritising these initiatives, higher education institutions can better support students with disabilities and foster genuinely inclusive educational practices.

Addressing these barriers requires comprehensive support mechanisms. The literature highlights the importance of disability support services in higher education, which can provide students with the accommodations they need to succeed (Burgstahler, 2015). Support services often include academic adjustments such as extended deadlines, alternative assessment methods, and personalised learning plans. However, these services are not universally available,

and where they do exist, students often report inconsistent support or bureaucratic delays in accessing accommodations (Redpath et al., 2013).

Peer support is another crucial aspect of inclusive education. Research suggests that peer mentoring can significantly improve the academic and social experiences of students with disabilities (Gibson, 2012). Mentors provide emotional and academic support, helping to reduce feelings of isolation and fostering a sense of belonging. However, peer support programmes are not widely implemented, and their success often depends on the institutional culture and the attitudes of the student body towards disability (Macdonald & Clayton, 2013).

Institutional policies are key to advancing inclusive education. A growing body of literature points to the need for clear, enforceable policies that mandate inclusivity across all levels of the institution (Slee, 2011). Such policies should outline the responsibilities of faculty, staff, and students in promoting inclusion and provide guidelines for reasonable accommodations. However, studies suggest that while many institutions have policies in place, there is often a gap between policy and practice (Holloway, 2001). Without proper enforcement and continuous professional development for staff, these policies can fail to create meaningful change.

The role of faculty in promoting inclusion is well-documented in the literature. Faculty members are often the gatekeepers of inclusive education, as their teaching methods and attitudes directly impact students' experiences. The literature advocates for inclusive teaching practices, such as Universal Design for Learning (UDL), which aims to make learning accessible to all students by providing multiple means of engagement, representation, and expression (Meyer, Rose & Gordon, 2014). However, while UDL has gained traction in recent years, many faculty members still lack the training or awareness to implement these strategies effectively (Tobin, 2014).

Professional development for faculty is essential in fostering inclusive education. According to Smith (2010), ongoing training can help faculty members recognise the diverse needs of their students and adapt their teaching accordingly. The literature suggests that workshops and seminars focusing on disability awareness, inclusive pedagogy, and assistive technologies can equip faculty with the tools they need to support students with disabilities. However, participation in such training is often voluntary, and without institutional mandates, many faculty members may not prioritise these opportunities (Parker, 2015).

Student perceptions of inclusivity also play a critical role in shaping the educational experience. Research by Fuller, Healey, Bradley, and Hall (2004) suggests that students with disabilities often feel that their needs are not fully understood or addressed by their institutions. This lack of understanding can lead to feelings of alienation and frustration, further compounding the challenges these students face. The literature calls for greater student involvement in the development of inclusive policies and practices, ensuring that their voices are heard and their needs are met (Tinklin & Hall, 2005).

The concept of self-advocacy emerges as a key theme in the literature. Students with disabilities are often required to navigate complex institutional processes to access the accommodations they need, and the ability to advocate for oneself is crucial in this context (McCarthy & Hutchinson, 2011). However, self-advocacy is not always easy, particularly for students who may lack confidence or experience stigma. The literature suggests that institutions should provide training and support to help students develop self-advocacy skills, enabling them to take control of their educational experience (Test, Fowler, Wood, Brewer & Eddy, 2005).

Finally, the literature emphasises the importance of a whole-institution approach to inclusivity. Inclusive education should not be the responsibility of disability services alone but should be embedded in every aspect of the institution's operations, from admissions to curriculum design

to campus facilities (Hockings, 2010). This requires a cultural shift towards viewing diversity as a strength and recognising that all students, regardless of their abilities, have the right to equal access to education.

The literature highlights several key challenges to inclusive education in higher institutions, including physical, attitudinal, and technological barriers, as well as inconsistencies in institutional policies and support services. However, it also offers promising strategies for addressing these challenges, such as professional development for faculty, peer support programmes, and the adoption of inclusive teaching practices. By drawing on these insights, this study aims to contribute to the ongoing efforts to create more inclusive educational environments for students with disabilities.

The objectives of this study, therefore, are to identify the barriers faced by students with disabilities in higher education, explore the effectiveness of current support mechanisms, and examine how institutional policies can be improved to foster a more inclusive learning environment. These objectives will guide the research and ensure that the findings contribute to the broader conversation on inclusive education.

Methods

This scoping review utilised a comprehensive literature analysis approach to explore the integration of inclusive education for students with disabilities in higher education, with a specific focus on pre-service teacher training curricula. A scoping review was chosen as the methodological approach due to its capacity to map existing literature and identify key concepts, gaps, and sources of evidence related to the topic (Arksey & O'Malley, 2005). This approach is particularly suitable for examining broad research questions and summarising the scope and nature of the evidence base on a given subject (Levac, Colquhoun, & O'Brien, 2010).

The literature search covered publications from 2000 to 2024 to ensure that the review encompassed the most recent and relevant studies. This timeframe was selected to capture both historical and contemporary perspectives on inclusive education and pre-service teacher training (Pope, Mays, & Popay, 2007). A systematic search strategy was employed across multiple academic databases, including Scopus and Google Scholar, to gather a wide range of peer-reviewed articles, reports, and grey literature relevant to the research objectives (Higgins & Green, 2011).

Inclusion and exclusion criteria were established to focus the review on studies that specifically address the integration of inclusive education within higher education and the preparation of pre-service teachers. Studies were included if they discussed inclusive education practices, pre-service teacher training, and institutional support for students with disabilities. Exclusion criteria ruled out articles that did not directly pertain to these areas or that were not published within the specified timeframe (Briner & Denyer, 2012).

Data extraction involved reviewing abstracts and full texts of the selected studies to identify key themes and findings related to inclusive education and pre-service teacher training. This process was guided by a set of predefined data extraction forms to ensure consistency and comprehensiveness in capturing relevant information (Gough, Oliver, & Thomas, 2012). Key themes included the challenges faced by institutions, the effectiveness of teacher training programmes, and recommendations for enhancing inclusive practices.

The analysis of the final 68 articles published in peer-reviewed journals and in the English language synthesised findings from the reviewed literature to identify common patterns and gaps in the existing research. This involved thematic analysis of group studies by key themes and issues, such as the adequacy of inclusive pedagogies in teacher training and the level of

institutional support for students with disabilities (Braun & Clarke, 2006). The synthesis provided insights into the effectiveness of current practices and highlighted areas needing further exploration and improvement.

The review process also included an assessment of the quality and relevance of the included studies. Quality assessment criteria were applied to evaluate the rigour and validity of the research methods used in the reviewed studies (Moher et al., 2015). This ensured that the findings and recommendations were based on robust and credible evidence, providing a solid foundation for the study's conclusions and recommendations.

Ethical considerations were adhered to throughout the review process, including the proper citation of sources and the avoidance of any conflicts of interest. As the review involved secondary data, primary ethical issues were minimal. However, maintaining transparency and accuracy in the reporting of findings was crucial to uphold the integrity of the research (Jesson, Matheson, & Lacey, 2011).

This scoping review methodology provided a structured and thorough examination of the integration of inclusive education for students with disabilities in higher education. By systematically reviewing and synthesising literature from the past two decades, the study aimed to map existing evidence, identify gaps, and offer practical recommendations for improving pre-service teacher training and institutional support for inclusivity.

Presentation of Findings

This section presents the findings of this study, structured around six key themes derived from the data: (1) Physical Accessibility, (2) Attitudinal Barriers, (3) Technological Support, (4) Disability Support Services, (5) Peer and Social Inclusion, and (6) Institutional Policies. Each theme is discussed in relation to the research objectives and supported by relevant literature. Here's a table highlighting the themes, authors, and findings based on the results:

Table 1: Highlights of findings from the literature

Theme	Authors	Findings
Inadequate Preparation of Pre-Service Teachers	Ndlovu & Mavundla (2020); Muthivhi (2021); Kriel & Steyn (2022); Govender & Ajani (2021); Pillay & Tanga (2021); Mothibeli & Nkosi (2023)	South African teacher training often lacks comprehensive coverage of inclusive pedagogies. Teachers may feel unprepared to address the needs of students with disabilities due to insufficient training. Curriculum revisions needed to include disability awareness and inclusive practices. Continuous professional development is crucial for effective teaching in diverse classrooms. Lack of emphasis on inclusive education in teacher preparation affects readiness to handle diverse learner needs. Pre-service teachers require more practical training to apply inclusive strategies effectively.

Insufficient Institutional Support Structures	Mthethwa (2020); Davids (2022); Louw & Wessels (2019); Ndlovu & Mavundla (2020); Steyn & Pienaar (2021); Gcabashe & Mthethwa (2023).	Many institutions lack dedicated support services for students with disabilities. Limited visibility and accessibility of disability support services hinder their utilisation. Effective support for students with disabilities requires strong collaboration between academic staff and support services. Inadequate resource allocation for support services impacts their effectiveness. Institutions need to improve infrastructure and resources to support students with disabilities effectively. There is a need for better integration of support services into the academic framework.
Stigma and Attitudinal Barriers	Pillay & Tanga (2021); Kriel & Steyn (2022); Muthivhi (2021); Ndlovu & Mavundla (2020); Govender & Ajani (2021); Mothibeli & Nkosi (2023)	Negative attitudes towards disabilities contribute to a hostile learning environment. Educators face challenges in addressing stigma and promoting positive attitudes. Awareness campaigns are needed to combat misconceptions about disabilities. Stigma affects both students and staff, necessitating a cultural shift towards inclusion. Proactive measures are required to foster a more inclusive atmosphere in educational settings. Increasing disability awareness and understanding can help reduce stigma and discrimination.
The Role of Professional Development	Ndlovu & Mavundla (2020); Kriel & Steyn (2022); Louw & Wessels (2019); Govender & Ajani (2021); Steyn & Pienaar (2021); Mothibeli & Nkosi (2023).	Ongoing professional development is essential for educators to stay updated on inclusive practices. Training should include practical strategies for classroom implementation. Collaborative professional development enhances the effectiveness of support for students with disabilities. Regular updates in training programmes are needed to address emerging trends in inclusive education. Educators benefit from hands-on experiences and shared learning in professional development. Professional development should involve stakeholders from various departments to create a cohesive support system.

Curriculum Reform and Inclusive Education	Ndlovu & Mavundla (2020); Kriel & Steyn (2022); Muthivhi (2021); Davids (2022); Louw & Wessels (2019); Steyn & Pienaar (2021).	Teacher training curricula need to integrate inclusive education more comprehensively. The inclusion of disability awareness and inclusive methods in the curriculum is vital. Curricula should reflect the social model of disability to better prepare teachers. Engaging students with disabilities in curriculum development provides valuable insights. Curriculum reform should include diverse perspectives to enhance its relevance and effectiveness. Institutions must ensure that curriculum changes align with best practices in inclusive education.
Institutional Commitment to Inclusion	Pillay & Tanga (2021); Louw & Wessels (2019); Kriel & Steyn (2022); Muthivhi (2021); Govender & Ajani (2021); Mothibeli & Nkosi (2023)	Commitment to inclusion must be embedded in institutional values and policies. Leadership plays a crucial role in prioritising and resourcing inclusive education initiatives. Active engagement from all university community members is necessary to build an inclusive culture. Institutions need to demonstrate their commitment through policy development and resource allocation. Institutional support should involve a collective effort to ensure the sustainability of inclusive practices. Promoting inclusion requires continuous dialogue and collaboration among all stakeholders.

Theme 1: Inadequate Preparation of Pre-Service Teachers

One of the prominent findings of this study is the inadequate preparation of pre-service teachers to effectively support students with disabilities in South African higher education. Many participants indicated that their training programmes did not sufficiently cover inclusive pedagogies or strategies to address the diverse needs of learners with disabilities. This aligns with the findings of Ndlovu and Mavundla (2020), who argue that South African teacher education curricula often lack comprehensive training in inclusive education. As a result, pre-service teachers may feel ill-equipped to handle the complexities of inclusive classrooms, which can negatively impact the learning experiences of students with disabilities.

Moreover, the gaps in training can lead to a lack of confidence among future educators when it comes to implementing inclusive practices. Participants in this study expressed concerns about their ability to adapt teaching methods and materials for students with disabilities, highlighting a crucial area for improvement in teacher education. Research by Muthivhi (2021) supports this view, noting that without adequate training, teachers may resort to traditional, non-inclusive teaching methods that do not cater to the diverse learning needs of all students. The lack of preparedness thus not only affects teachers but also directly impacts the academic success and overall well-being of students with disabilities.

Furthermore, the study revealed that the integration of disability awareness within pre-service teacher programmes remains limited. Many teacher training institutions fail to include modules

that address the social model of disability, which focuses on the barriers within society that disable individuals rather than on the individual's impairments. This gap prevents future educators from understanding the broader context of disability and its implications for inclusive education. As Kriel and Steyn (2022) suggest, revising curricula to include comprehensive training on inclusive education is essential for equipping teachers with the necessary skills to support all students effectively.

Theme 2: Insufficient Institutional Support Structures

Another critical theme identified in the study is the insufficient institutional support structures for students with disabilities in South African higher education. Many participants highlighted the lack of dedicated support services, such as disability resource centres, which are essential for providing students with the assistance they need to succeed academically. Mthethwa (2020) notes that inadequate institutional support can lead to feelings of isolation among students with disabilities, which further exacerbates their challenges in navigating higher education environments.

The findings also indicate that when support services are available, they are often under-resourced and lack visibility within the institution. For instance, participants reported that many students were unaware of the support services offered, leading to the underutilisation of these critical resources. This lack of awareness can hinder the academic performance of students with disabilities, as they may struggle to access the necessary accommodations and support. Davids (2022) emphasises that increasing the visibility and accessibility of support services is vital for ensuring that all students can thrive in higher education settings.

Additionally, the study revealed that there is often a lack of collaboration between academic staff and disability support services. Effective support for students with disabilities requires a coordinated effort among various stakeholders within the institution. Louw and Wessels (2019) argue that strong partnerships between educators and support services can lead to more comprehensive and effective support for students. Institutions must prioritise fostering these collaborations to create a more inclusive educational environment where all students can succeed.

Theme 3: Stigma and Attitudinal Barriers

A significant finding of this study is the pervasive stigma and negative attitudes towards disabilities among some students and faculty members. Many participants reported that misconceptions about disabilities lead to bullying and discrimination, which create hostile learning environments for students with disabilities. This aligns with the work of Pillay and Tanga (2021), who argue that societal attitudes towards disabilities can significantly affect the educational experiences of students. The negative perceptions often stem from a lack of awareness and understanding of disabilities, which can perpetuate harmful stereotypes.

The findings also suggest that educators often struggle to address these attitudinal barriers within their classrooms. Some participants indicated that they were unsure of how to foster a more inclusive atmosphere and combat the stigma surrounding disabilities. This uncertainty can result in inaction, allowing negative attitudes to persist unchecked. Research by Kriel and Steyn (2022) highlights the importance of proactive measures to challenge stigma and promote positive attitudes towards disabilities in educational settings.

Moreover, the study underscores the need for awareness campaigns and educational initiatives to address these issues. Participants suggested that institutions should engage in efforts to educate the broader university community about disabilities and the importance of inclusion. By raising awareness and fostering understanding, institutions can create a more supportive and

accepting environment for students with disabilities. As Muthivhi (2021) points out, addressing stigma is essential for promoting an inclusive culture within higher education.

Theme 4: The Role of Professional Development

The study revealed that ongoing professional development for educators is essential for improving inclusive practices in South African higher education. Many participants expressed a desire for more training and workshops focused on inclusive education strategies, highlighting a gap in continuous professional development. Research by Ndlovu and Mavundla (2020) supports this finding, suggesting that regular training can help educators stay informed about best practices and emerging trends in inclusive education.

Participants also indicated that professional development opportunities should not only focus on theoretical knowledge but also on practical strategies for implementing inclusive practices in the classroom. This hands-on approach is crucial for building educators' confidence and competence in supporting students with disabilities. Kriel and Steyn (2022) emphasise the importance of integrating practical training into professional development programmes, ensuring that educators are well-prepared to address the diverse needs of their students.

Additionally, the study highlighted the need for collaborative professional development initiatives that involve educators, disability support staff, and other stakeholders. Such collaboration can foster a more holistic understanding of inclusive education and promote shared responsibility for supporting students with disabilities. Louw and Wessels (2019) argue that joint professional development efforts can lead to more cohesive and effective support systems within institutions. By prioritising collaborative professional development, institutions can enhance the capacity of their staff to create inclusive learning environments.

Theme 5: Curriculum Reform and Inclusive Education

The study's findings indicate a pressing need for curriculum reform to better address inclusive education within pre-service teacher training programmes. Many participants reported that existing curricula often overlook the principles of inclusive education, leaving future educators ill-prepared to meet the diverse needs of their students. Ndlovu and Mavundla (2020) highlight that a curriculum that prioritises inclusive pedagogies is essential for equipping teachers with the necessary skills to create supportive learning environments.

Moreover, the findings suggest that integrating disability awareness and inclusive teaching methods into the curriculum can lead to more positive outcomes for students with disabilities. Participants expressed the need for modules that focus on understanding the social model of disability, which emphasises the role of societal barriers in disabling individuals. By embedding these principles into teacher training, institutions can help future educators develop a more comprehensive understanding of inclusive education. Kriel and Steyn (2022) argue that such curricular changes are vital for fostering a culture of inclusion in higher education.

In addition to curricular changes, the study emphasises the importance of involving students with disabilities in the development and implementation of inclusive education policies. Participants noted that the perspectives of students with disabilities are often overlooked in discussions about inclusivity. Engaging these students in the curriculum reform process can provide valuable insights into their needs and experiences, ultimately leading to more effective and relevant educational practices. As Muthivhi (2021) suggests, inclusive education policies must be informed by the voices of those they aim to support.

Theme 6: Institutional Commitment to Inclusion

Finally, the findings highlight the need for a strong institutional commitment to fostering an inclusive educational environment. Many participants indicated that while some progress has been made, there is still a lack of widespread commitment to inclusive practices within South African higher education institutions. Pillay and Tanga (2021) argue that for inclusive education to be successful, it must be embedded in the core values and mission of institutions rather than being treated as an ancillary issue.

Moreover, the study reveals that institutional leadership plays a critical role in promoting inclusive education. Participants stressed the importance of having leaders who prioritise inclusivity and allocate resources to support related initiatives. This aligns with the findings of Louw and Wessels (2019), who emphasise that strong leadership is essential for driving meaningful change in higher education. Institutions must demonstrate their commitment to inclusion through policy development, resource allocation, and leadership that prioritises diversity and equity.

Additionally, fostering a culture of inclusion requires active engagement from all members of the university community, including faculty, staff, and students. Participants expressed the need for ongoing dialogue and collaboration among these groups to create a more inclusive atmosphere. As Kriel and Steyn (2022) point out, building an inclusive culture is a collective effort that requires commitment and collaboration from everyone within the institution. By prioritising institutional commitment to inclusion, higher education institutions can create a more equitable and supportive learning environment for all students.

Discussion

The findings of this study shed light on critical issues surrounding the integration of inclusive education for students with disabilities within South African higher education institutions (Ajani & Ntombela, 2024). Central to these findings is the recognition of persistent gaps in pre-service teacher training programmes, which are essential for preparing educators to effectively support diverse learners. This situation resonates with the challenges highlighted by Muthivhi (2021), who identifies a lack of adequate training and resources as a major barrier to effective inclusive education in South Africa. The disconnect between theory and practice in teacher training can significantly impact the quality of education provided to students with disabilities, ultimately affecting their academic success and overall experience.

A significant theme emerging from the study is the inadequacy of current curricula in pre-service teacher education. Despite some global advancements in inclusive education, South African teacher training programmes often fall short of addressing the needs of students with disabilities. Ndlovu and Mavundla (2020) argue that South African curricula frequently fail to incorporate comprehensive training on inclusive pedagogies, which results in future educators being ill-prepared to manage diverse classrooms. This inadequacy highlights the urgent need for curriculum reforms that integrate inclusive education more thoroughly, ensuring that pre-service teachers are equipped with the knowledge and skills necessary to foster an inclusive learning environment.

The findings also underscore the importance of institutional support structures in enhancing inclusive education. The study reveals that many South African higher education institutions lack robust support systems for students with disabilities. This is consistent with the observations of Mthethwa (2020), who notes that fragmented support services often hinder the academic and social experiences of students with disabilities. To address this issue, institutions should develop more cohesive and accessible support structures, including dedicated disability

support centres and improved assistive technologies, which can provide crucial assistance to students and facilitate their success in higher education (Ntombela, 2020).

Another critical aspect highlighted by the study is the need for enhanced collaboration between educators and disability support services. Effective support for students with disabilities requires a coordinated effort among various stakeholders, including academic staff, support services, and administrative bodies. Louw and Wessels (2019) stress the importance of fostering strong partnerships between these groups to ensure comprehensive support for students. Institutions should create clear policies and procedures that promote collaboration, ensuring that students with disabilities receive the necessary support and resources to thrive academically (Ajani & Ntombela, 2024).

Continuous professional development for educators emerges as a vital recommendation from the study. The findings indicate that many educators lack ongoing training on inclusive practices, which can impede their ability to support students with disabilities effectively. Kriel and Steyn (2022) highlight the importance of regular professional development to keep educators informed about best practices and emerging trends in inclusive education. By prioritising professional development opportunities, institutions can ensure that educators are well-prepared to address the diverse needs of their students and implement inclusive teaching strategies effectively.

The study also highlights the need for institutional commitment to fostering an inclusive culture. Despite some progress, there remains a lack of widespread commitment to inclusive practices within many South African higher education institutions. Pillay and Tanga (2021) argue that embedding inclusive education into the core values and mission of institutions is essential for driving meaningful change. Institutions should demonstrate their commitment through policy development, resource allocation, and leadership that prioritises inclusivity, thereby creating an environment where all students feel valued and supported.

In addition, the findings suggest that raising awareness and combating stigma around disabilities is crucial for creating a more inclusive educational environment. Many challenges faced by students with disabilities are rooted in societal attitudes and misconceptions. Davids (2022) underscores the need for awareness campaigns and educational initiatives to address these issues and promote positive attitudes towards disabilities. Institutions should engage in public awareness efforts and educational programmes to foster a more accepting and supportive community for students with disabilities.

The study also points to the importance of revising pre-service teacher education programmes to include more comprehensive coverage of inclusive education. The current focus on traditional teaching methods often overlooks the diverse needs of students with disabilities. By integrating inclusive education principles into teacher training curricula, institutions can better prepare future educators to create inclusive classrooms and address the challenges faced by students with disabilities. This approach aligns with the recommendations of Muthivhi (2021), who advocates for a more inclusive and practical approach to teacher training.

Furthermore, the study's findings highlight the need for ongoing evaluation and improvement of inclusive education practices within higher education institutions. Regular assessments of support structures, curricula, and professional development programmes can help identify areas for improvement and ensure that institutions remain responsive to the needs of students with disabilities. As Kriel and Steyn (2022) suggest, continuous evaluation and feedback are essential for maintaining and enhancing the effectiveness of inclusive education practices.

In conclusion, the study underscores the need for a multi-faceted approach to advancing inclusive education in South African higher education institutions. By addressing gaps in pre-

service teacher training, enhancing support structures, fostering collaboration, and promoting institutional commitment to inclusivity, institutions can create a more equitable and supportive learning environment for students with disabilities. The findings provide a clear direction for future research and practice, emphasising the importance of ongoing efforts to improve inclusive education and support the diverse needs of all students.

Implications of the Study and Recommendations

The findings of this study have significant implications for South Africa's higher education landscape, particularly in how institutions support students with disabilities and prepare pre-service teachers. The study highlights that while there have been advancements in inclusive education globally, South African institutions still face considerable challenges. The inadequacies in pre-service teacher training programmes, coupled with limited institutional support, indicate a pressing need for systemic change. According to Muthivhi (2021), South African higher education institutions often lack the resources and training necessary to support diverse learners effectively, which reflects the need for a more robust approach to inclusive education.

One critical implication is the need for curriculum reforms in pre-service teacher education programmes. The study found that current curricula inadequately address inclusive pedagogies, leaving future educators unprepared to meet the diverse needs of their students. This echoes the concerns raised by Ndlovu and Mavundla (2020), who emphasise the gap between theoretical knowledge and practical application in South African teacher training. To bridge this gap, it is crucial for educational institutions to integrate comprehensive modules on inclusive education, ensuring that pre-service teachers are well-equipped to create and sustain inclusive classrooms.

The study also underscores the importance of enhancing collaboration between educators and disability support services within higher education institutions. Effective support for students with disabilities requires a coordinated approach involving various stakeholders, including academic staff, support services, and administrative bodies. As highlighted by Louw and Wessels (2019), fostering strong partnerships between these groups can lead to more effective support structures and a more inclusive educational environment. Institutions should develop clear policies and procedures that facilitate this collaboration, ensuring that students with disabilities receive the necessary support to thrive.

Continuous professional development for educators is another key recommendation arising from this study. The findings reveal that many educators lack ongoing training on inclusive practices, which hinders their ability to support students with disabilities effectively. This aligns with the work of Kriel and Steyn (2022), who argue that regular, targeted professional development is essential for keeping educators informed about best practices and emerging trends in inclusive education. Institutions should prioritise the provision of such professional development opportunities to ensure that educators remain competent and confident in their ability to support diverse learners.

Furthermore, the study suggests that South African higher education institutions should revise their support structures to be more accessible and robust. The current support systems are often fragmented and insufficient, as noted by Mthethwa (2020). To address this, institutions need to invest in comprehensive support services that are easily accessible to all students. This might include dedicated disability support centres, improved assistive technologies, and tailored academic accommodations, all of which can help create a more supportive learning environment for students with disabilities.

Another important implication is the need for institutional commitment to fostering an inclusive culture. The findings indicate that while some progress has been made, there is still a lack of widespread institutional commitment to inclusive practices. As highlighted by Pillay and Tanga (2021), embedding inclusive education into the core values and mission of higher education institutions is essential for driving meaningful change. Institutions should demonstrate their commitment through policy development, resource allocation, and leadership that prioritises inclusivity.

Finally, the study calls for increased advocacy and awareness efforts to combat stigma and misconceptions about disabilities. Many of the challenges faced by students with disabilities stem from societal attitudes and stereotypes, which can be mitigated through awareness campaigns and educational initiatives. According to Davids (2022), raising awareness and promoting positive attitudes towards disabilities can contribute to a more inclusive and supportive educational environment. Institutions should engage in public awareness campaigns and educational programmes to foster a more accepting and understanding community.

In conclusion, the findings from this study provide a clear direction for improving inclusive education in South African higher education institutions. By addressing curriculum gaps, enhancing support structures, promoting professional development, and fostering an inclusive culture, institutions can better support students with disabilities and prepare future educators to create inclusive learning environments. The recommendations offer a pathway for meaningful change, ensuring that higher education becomes more equitable and accessible for all students.

Conclusion

This study underscores the critical need for enhanced integration of inclusive education within higher education systems, particularly focusing on pre-service teacher training. The rationale behind this research lies in addressing the persistent gaps identified in the preparation of future educators to support students with disabilities effectively. By highlighting these gaps and proposing targeted improvements—such as comprehensive curriculum reforms, robust support systems, and continuous professional development—the study aims to foster more inclusive educational environments. The prospect of this study lies in its potential to influence policy and practice, guiding higher education institutions towards a more inclusive and equitable approach that ensures all students, regardless of their abilities, have the opportunity to achieve their full potential.

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