Universal Design for Learning and Disability Inclusion in South African Higher Education Curriculum

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Abstract

During apartheid in South Africa, students with disabilities (SWDs) were educated in special schools and taught an inferior curriculum, preventing them from accessing and participating with success in universities. To redress this, the new democratic government that came to power after apartheid put in place a range of laws to address the apartheid's curriculum inadequacies. However, this has had little impact in the academic success of SWDs, whose dropout rates continue to increase. In order to broadly understand the inclusion of SWDs in higher education (HE) curriculum transformation, this study utilised a document analysis method to conduct a critical review of literature on the experiences of lecturers, SWDs and Disability Unit Staff Members (DUSMs). The study sought to explore whether lecturers' curriculum practices could be said to be informed by Universal Design for Learning (UDL), which was also used as theoretical lens. The findings indicate that due to lack of training both lecturers willing and unwilling to support SWDs in the curriculum are struggling to operationalise UDL principles in designing and delivering their curriculum. The study concludes by recommending that university management invest in professional development courses in UDL aimed at practically training lecturers on how to inform the design of their curriculum with UDL principles. This study has added new knowledge by highlighting the need for the active involvement of the university management, and thus it recommends future studies to sample the university management on measures they are taking in supporting disability inclusion initiatives on their campuses.

Keywords: Universal Design for Learning, universal curriculum design, higher education transformation, inclusive education, disability inclusion, lecturers, Disability Units, university management, ableism, diversity, professional development courses

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Introduction

Recent literature has discussed how twenty-first university classrooms consist of students diverse in disabilities, race, ethnicity, culture and language (MCGuire-Schwartz & Arndt 2007). Given that these students are learning the same general curriculum[1], Tinto (1982) calls for educators to make their curriculum more accessible in order to achieve both the retention and academic success of all students in these classroom settings. Moriña *et al.* (2012: 3) have enjoined countries that are transitioning from a special education system to an inclusive education system to begin the process by modifying their teaching and learning practices until they are 'as inclusive as possible'. In particular, if mainstream educational institutions are to achieve meaningful inclusive education for SWDs, the participation of SWDs within the curricula must increase (Booth 1996). In the South African context, inclusive education has been defined as supporting learners with disabilities so that they are able 'to be involved with their non-disabled peers to the maximum extent possible' in the curriculum (Dalton *et al*. 2012: 3). This definition arose from the context of South Africa's history, as the marginalisation of SWDs was rife during apartheid South Africa, as 'the curriculum (and education system as a whole) generally failed to respond to the diverse needs of the learner population, resulting in massive numbers of drop-outs, push-outs and failures' of SWDs (DoE 2001: 5). To address these challenges, the post-apartheid South African government implemented numerous transformation-oriented supportive disability policies to improve the academic access outputs of SWDs. Despite these efforts, however, recent literature indicates that South African higher education institutions (HEIs) are still lagging behind in terms of improving the academic success of SWDs by allowing them to access the general curriculum on par with their non-disabled peers (Chiwandire & Vincent 2019; see also Mutanga 2019).This has become a serious concern, with numerous South African scholars calling for the need for adequate strategies that address issues

[1] As adapted from the definition of curriculum by South Africa's Department of Education (DoE 2001: 19), curriculum is understood in a broad sense. 'It includes what is taught, the medium of instruction, how the curriculum is organised and managed, the methods and processes used in teaching, the pace of teaching, the learning materials and equipment used, the nature of required fieldwork experiences, as well as how learning is assessed'.

such as support services provision, curriculum adaptations, alternative assessment options and adaptations to be developed and put in place in HEIs (Howell 2005; Ntombela & Soobrayen 2013; Ndlovu & Walton 2016). However, these efforts, it is argued, have remained fruitless, as most South African HEIs continue to marginalise SWDs by delivering inflexible and inaccessible curriculum (Chiwandire & Vincent 2019). The purpose of the present study is, therefore, to specifically explore and understand the curriculum practices within South African HEIs, particularly from the literature on the experiences of lecturers, SWDs and DUSMs. Furthermore, I sought to understand these curriculum issues broadly from a transformation standpoint in light of recent ongoing calls for the need to transform the South African HEIs' curriculum to reflect their diverse student population. Hence, the present study seriously cogitates Ntombela's (2013) suggestion that South African HEIs should prioritise the academic needs of minority groups like SWDs, whose needs are also significant, in order to not compromise the process of transformation. This suggestion guided the present study, as I was mainly interested in gaining an in-depth understanding as to how SWDs are faring in the curriculum from a transformation standpoint. This is because some SWDs may be unable to participate in functional and general education activities in the same manner as their non-disabled classmates, and may require adaptations in the curriculum to facilitate maximal independent participation (Ryndak & Alper 1996).

Disability Inclusion and HE Curriculum Transformation

Within inclusive education debates, transformation has often been understood from an academic inclusion standpoint, with educational institutions being called upon to transform their cultures to increase access, participation and academic achievement of SWDs (Artiles *et al*. 2006). Ainscow *et al*. (2006: 16) advocate for a transformative view of inclusive education 'in which diversity is seen as making a positive contribution to the creation of responsive educational settings'. As Avissar (2011) argues, the first environment that needs to be transformed is the general classroom setting itself, through the provision of a flexible and accessible curriculum that addresses the diverse learning needs of students, including those with disabilities. Within the South African context, one way of promoting disability inclusion can be through campuses' provision of accessible curricula and assessment practices by lecturers (Lyner-Cleophas 2019), which are backed by supportive disability

legislative framework that legally entitle SWDs the right to participate fully in the curriculum once they enrol in HEIs.

Furthermore, Section 29[1][a] of the new Constitution guarantees everyone, including persons with disabilities (PWDs), the right to education. The 2001 *Education White Paper 6: Special needs education. Building an inclusive education and training system* states that '[n]ew curriculum and assessment initiatives will be required to focus on the inclusion of the full range of diverse learning needs' (DoE 2001: 31-32). This suggests South Africa's *White paper on post-school education and training*, could be achieved through strengthening learning and teaching across the HE system, allowing these institutions to improve the success rates of SWDs (DHET 2013). Measures such as these notwithstanding, educational research in South Africa has shown that the reality on the ground with regards to how the curriculum is delivered in classrooms still excludes SWDs, depriving them of opportunities to fully 'see themselves reflected in their curriculum' (Canadian Ministry of Education 2009). Recently, the South Africa's *Strategic Policy Framework on Disability for the Post-School Education and Training System* has pointed to an inflexible curriculum and teaching and learning environment as two of the institutional challenges that are hindering the academic inclusion of SWDs in HEIs (DHET 2018).

The early transitioning into democracy saw the South African government implementing policies aimed at the radical transformation of the HE curriculum. This process was facilitated with the enactment of the *White Paper 3: A Programme for Higher Education Transformation*, which aimed at facilitating access to HE for the historically disadvantaged students, enjoining lecturers to use 'flexible models of learning and teaching, including modes of delivery, to accommodate a larger and more diverse student population' (DoE 1997: 7). However, debates on curriculum and transformation within the South African HE context have so far focused on issues of race, with particular attention being paid on the need for universities to dismantle the apartheid racist curricula and replace it with new curricula which particularly reflect the lived experiences of Black South Africans (Lange 2014; Badat 2010; Msila 2007). Likewise, proponents of decolonisation of the curriculum have also argued that South African universities can decolonise the curriculum through teaching content that is relevant to African conditions (Jansen 2017).

This focus on race issues has recently been criticised by proponents of inclusive education as narrow, because it fails to respect diversity in its broader sense by also including SWDs, a group that was also historically excluded. In

particular, disability scholars have voiced concerns about the exclusion of disability in South African HE transformation agendas (Ohajunwa *et al*. 2014; Matshedisho 2007). The failure for HEIs to transform their curriculum has disproportionately affected the academic success of SWDs in these institutions. For instance, several studies into the experiences of SWDs in South African HEIs (Tugli & Klu 2014; Tugli *et al*. 2013) found that SWDs who access HEIs are mostly at high risk of not finishing their degrees at the allocated time, or are more likely to drop out because of curricular barriers. Most recently, Mutanga (2017) has attributed the high drop-out rates of SWDs in HEIs to inflexible and inaccessible curriculum, and this has resulted in SWDs making up less than 1% of the total student population in South African HEIs. It is against this background that some recent disability policies have called for South African HEIs to accelerate genuine transformation that aims to achieve the full inclusion, integration and equality for SWDs (DHET 2018). In what follows I discuss in detail the theoretical framework which informed the present study.

Universal Design for Learning Framework

According to the Center for Applied Special Technology (CAST 2010), UDL is 'a framework for designing curricula that enable all individuals to gain knowledge, skills, and enthusiasm for learning. UDL provides rich supports for learning and reduces curriculum barriers while maintaining high achievement standards for all.' Mitchell (2010: 13) has defined UDL as involving 'planning and delivering programmes with the needs of all students in mind from the outset. It applies to all facets of education: from curriculum, assessment and pedagogy to classroom and school design.' UDL has its roots in the concept of universal design, which, according to Campbell (2004), 'was first introduced in the field of architecture', and enjoins building planners, engineers, architects and the like to design 'buildings that are suitable for all users' (Imrie & Hall 2001: 335), rather than taking the approach of adding to or adapting physical spaces designed for non-disabled people (Chard & Couch 1998).

Central to UDL is its intention to primarily address the inflexible curricula that impacts on SWDs' participation with success (CAST 2014). UDL's emphasis is on the 'flexibility and customisation of options within the curricula [which] are critical to student success' (Anstead 2016: 16). The curriculum built on principles of UDL has been commended for its respect for diversity and its ability to accommodate 'differences, creating learning expe-

riences that suit the learner and maximise his or her ability to progress' (Rose *et al*. 2002: 70). In order to practically apply UDL principles, firstly by utilising the principle of 'multiple representation', the lecturers 'allow students with sensory disabilities (e.g., blindness or deafness); learning disabilities (e.g., dyslexia); and language or cultural differences to make connections between various learning concepts' (Anderson 2019: 2). Secondly, employing the principle of 'multiple means of action and expression' increases the lecturer's chances of accommodating 'students with significant movement impairments (e.g., Parkinson's disease), or those with strategic and organizational abilities (e.g., ADHD, Asperger Syndrome), and also ones with language barriers by providing different methods of navigating the learning environment' (Anderson 2019: 2). Thirdly, employing the principle of 'multiple means of engagement' is important in sensitising lecturers to take into consideration the fact that 'learners significantly differ in the ways in which they can be engaged or motivated to learn', and this would require such lecturers to provide multiple ways for their learners to engage in the learning process holistically (Anderson 2019: 2).

McGuire-Schwartz & Arndt (2007: 128) also argue that curriculum informed by UDL offers promise of transforming university classroom practices. To date, studies on HE curriculum and UDL have mainly been conducted in the United States (US), where it has been suggested that employing UDL is an effective way of transforming HE curricula to be accessible to SWDs (Bruch 2003). Several educational institutions in the US have often been cited as best practices in terms of applying UDL framework, and UDL has also been formally mandated as law, which has played an important role in breaking negative biases against SWDs in the classroom setting (Anstead 2016). For instance, the US's disability legislation, the *Individuals with Disabilities Education Act* (IDEA), 'affirms UDL as an efficient and effective way to provide all students access to curriculum and assessment' (Wills 2008). Likewise, the authorisation of the US's *Higher Education Opportunity Act* of 2008 placed an obligation on all HEIs that receive federal funding for teacher quality partnership grants 'to report on the outcomes of UDL training within their preservice preparation programs' (Edyburn 2010: 33). This means that lecturers who inform their curriculum with UDL principles by ensuring that they comply with the non-discriminatory law treat SWDs as equal with their non-disabled peers, ensuring all learners 'receive flexible instructional methods, materials, and assessments to meet

their unique needs' (Anstead 2016: 1). For purposes of the present study, I pay particular attention to three core principles of UDL, which include:

> …. 'Multiple means of representation': provide multiple, flexible methods of presentation to support recognition learning (the HOW of learning); 'multiple means of action and expression': provide multiple, flexible methods of action and expression to support strategic learning (the WHAT of learning) and 'multiple means of engagement': provide multiple, flexible options for engagement to support affective learning (the WHY of learning) (Dalton *et al*. 2012: 3).

If employed, these UDL principles can play an important role in helping lecturers to effectively address a wide range of learning needs in a single classroom (Dalton *et al*. 2012). However, putting these principles in practice is much easier said than done for many lecturers. In order to address this barrier, some HEIs have resorted to offering their lecturers professional development courses in UDL so that these lecturers can understand UDL principles and apply them to their specific learning environment accordingly (Anderson 2019). The millennial, for instance, has seen some US HEIs training lecturers in the use of UDL principles to modify their curricula, instruction, assessment and environment as an effective way of addressing the diverse learning needs of the recent increasing enrolment rates of SWDs, and this has had positive change in participating lecturers' teaching behaviour (Langley-Turnbaugh *et al*. 2013). Within the South African context, the UDL framework was first mentioned in the 2015 *Guidelines for the creation of equitable opportunities for people with disabilities in South African Higher Education: Draft for Discussion* (Howell 2015). Despite this policy document's call for lecturers to inform their curriculum with such concepts as UDL 'if they are to help make their curriculum accessible to students with diverse learning needs' in HE (Howell 2015: 10), to date no South African study has been conducted on this matter. The only available study on UDL and curriculum issue to date has focused only on supporting South African 'teachers and therapists who are working with children with disabilities either in special schools or in the mainstream to meet a wider range of learning needs' (Dalton *et al*. 2012: 4). Thus, the present study aims to fill in this gap, and in what follows I discuss the methodology employed to collect and analyse the data presented in this study.

Methodology

Despite the important role played by lecturers in achieving inclusive education for SWDs as indicated above, there is a dearth of literature on how South African lecturers are expected to accomplish the task of tailoring the curriculum to suit each learner's particular needs (Donohue & Bornman 2014). To fill in this gap, I used Google Scholar to conduct a document analysis of published and unpublished literature – South African national and disability policies, local and accredited international peer reviewed journal articles, online newspaper articles, Masters and PhD dissertations – between the period of 1994 to 2019 in order to gain an in-depth understanding of lecturers' teaching practices in relation to issues of curriculum access for SWDs, as well as how SWDs experience their own participation in the curriculum. Bowen (2009: 27) describes document analysis as 'a systematic procedure for reviewing or evaluating documents – both printed and electronic'. As a qualitative analytical research method, document analysis 'requires that data be examined and interpreted to elicit meaning, gain understanding, and develop empirical knowledge' (Bowen 2009: 27). In searching for the literature, such key words as 'students with disabilities'; 'curriculum'; 'inclusive education'; 'transformation'; 'ableism'; 'lecturers'; 'diversity'; 'Universal Design for Learning'; 'Disability Unit Staff Members'; and 'Disability Units' were used.

Given that most of the South African literature on disability inclusion in HE has mainly been written from the perspectives of lecturers, DUMSs and SWDs, I reviewed the literature on all these stakeholders in order to achieve a holistic representation of diverse voices. Firstly, I reviewed the literature on the experiences of lecturers, particularly how they support their SWDs in university classrooms, because South Africa's disability policies view this cadre as important if HEIs are to achieve inclusive education for SWDs. South Africa's *White Paper 6*, for instance, views classroom educators as a primary resource for achieving the goal of an inclusive education and training system (DoE 2001). Apart from this, I also found reviewing the literature on lecturers important because, following Edna (2016), the successful implementation of inclusive education is highly contingent on the availability and active role of lecturers who are disability-sensitive and well-trained to teach SWDs.

Secondly, in their study of SWDs, Fuller *et al*. (2004) recommended that one of the effective ways of studying disability and related issues in HEIs is by listening to the voices of SWDs as they reflect on their learning and

assessment experiences, as this group is often at most risk of retention and academic failure. Following this suggestion, I reviewed the literature on the experiences of SWDs. Thirdly, I sampled the literature on the experiences of DUSMs from various South African HEIs, because this group has been called to address challenges facing SWDs through playing 'an important role in ensuring fair and equitable policies and practices for students with disabilities' (Pretorius *et al* 2011: 2). Howell (2015) also argues that South African Disability Units must play a key role in influencing the teaching and learning processes on campuses if they are to foster a holistic approach to disability inclusion. Recent disability policies have also called upon Disability Units to follow SWDs 'in their studies and monitor progress to ensure that students receive or are accorded maximum support to succeed in their studies and to minimise student drop-out' (DHET 2018: 63). Given that most DUSMs in this literature spoke negatively about their respective universities' management personnel, I had to find more literature discussing the role of the university management in disability inclusion issues. It was hoped that this would add value to the present study, following Howell's (2015) suggestion that addressing disability inclusion from a transformation standpoint is a senior leadership concern, and thus the university management ought to take disability inclusion more seriously in their strategic thinking and associated institutional planning.

Reviewed data were coded and analysed using Braun and Clarke's method of inductive and deductive thematic analysis (2006). I then analysed data in relation to theory by creating categories in the data which were of relevance to the dominant theoretical constructs of UDL: principles of 'multiple means of representation', 'multiple means of action and expression' and 'multiple means of engagement' (Dalton *et al*. 2012: 3). In what follows I discuss in greater detail the dominant findings of the present study.

Findings

Lecturers' Lack of Training in UDL

One of the benefits of delivering a flexible and accessible curriculum is that it effectively addresses the diversity of students present in any particular educational programme (Mittler 2000). Although it has been suggested that South African lecturers can achieve this through adopting a learner-centred

approach that particularly enhanced the learning needs of SWDs (van Jaarsveldt & Ndeya-Ndereya 2015: 2), lack of training in UDL continues to be a stumbling block for some of these lecturers. Mutanga & Walker's (2017) study, which explored lecturers' perspectives on measures they are taking to include SWDs, found that SWDs were most at risk of academic failure because their lecturers lacked understanding regarding the need to address diversity in their teaching and learning activities. From a diversity standpoint, I found out that one of the challenges that continues to hamper progress for the practical realisation of inclusive education in Africa in general is the lack of lecturers' skills in adapting the curriculum to meet a range of learning needs (Chataika *et al*. 2012). This is because the successful practical implementation of UDL principles by lecturers within HE is largely dependent on the particular training on how to operationalise UDL principles through, for example, adapting 'the curriculum and teaching methods in accordance with individual student needs' (Kraglund-Gauthier *et al*. 2014: 8). In order to achieve this, Canadian HEIs, such as Durham College and the University of Ontario (UOIT), 'share a faculty enrichment centre which offers training in UDL principles and has a web site devoted to educating faculty on applying UDL principles to online learning' (Anderson 2019: 3).

A widespread effort to operationalise UDL principles is not currently being made in South Africa, as is evident from the literature on the experiences of both SWDs and lecturers, as the latter still lack appropriate skills for adapting the curriculum. For instance, one study of lecturers from the University of Cape Town by Ohajunwa *et al*. (2015) detailed that participants who were committed to supporting SWDs in the mainstream curriculum mostly did so out of their personal interest or by their own methods, often in an ad hoc manner, because they lacked of training on how to appropriately support their SWDs. I found that most South African HEIs are not providing staff development and training on campus regarding disability, despite recent recommendations that the university management within these institutions should provide professional development programmes (Makiwane 2018). This has mainly been confirmed by various studies of DUSMs, who have raised concerns about the university management personnel's reluctance to budget or invest financially in disability inclusion initiatives, including curriculum accessibility, as they view doing so as a costly exercise (FOTIM 2011; Ntombela & Soobrayen 2013; Mutanga 2015; Chiwandire 2017; Chiwandire 2020). Research further indicates that even universities which offer such staff

and development training on disability issues, like Stellenbosch University, do not make such training compulsory for lecturers, and this often results in low turnout (Lyner-Cleophas 2016).

Other studies have shown that lecturers' lived experiences of also having a disability has positively impacted in their willingness to support their SWDs in the curriculum despite these lecturers' lack of training in operationalising UDL principles. This is evidenced by Chiwandire's (2017) study of SWDs and staff with disabilities at Rhodes University that found that only the two lecturers with disabilities expressed positive attitudes towards teaching an accessible curriculum that addresses the learning needs of SWDs, attributing their positive attitudes to their personal lived experiences. In addition to that, Ohajunwa (2012) conducted a study of the University of Cape Town's lecturers, which aimed to find out how disability issues can be included in undergraduate curricula. This study revealed that, despite the willingness on the part of some lecturers to include disability issues in undergraduate curricula, most of these participants were unsure if they were using the best methods, and the seven academic staff that included disability issues were doing so in isolation as opposed to as part of a departmental effort (Ohajunwa 2012). Lecturers sampled in a study conducted by Ohajunwa *et al*. (2015) expressed concerns that an overcrowded curriculum presents challenges to disability inclusion in teaching and research. Such complaints could possibly be mitigated if these lecturers had received training in UDL principles, as they would employ such principles in making efforts to ensure that inclusive features have been built into classroom instruction right from the outset of designing the curriculum (Brinckerhoff *et al*. 2002).

Likewise, Nwanze (2016) conducted a study that examined how disability issues can be included into the undergraduate curriculum at the University of Cape Town. This study found that 'disability issues were included, but with minimal support and was done through individual effort and not a university collective effort because lecturers did not have support structures on how to even begin to think of including disability issues' (Nwanze 2016: iii). These studies clearly show that lecturers' passion to support SWDs without the backing of expertise in curriculum development using UDL principles will likely result in such lecturers only achieving partial inclusive education for the minority SWDs, because, in reality, designing a curriculum that will also be accessible for students with diverse disabilities requires thorough planning (Hatlen 1996). Such thorough planning ought to be

informed by UDL framework, as it advocates for curriculum development that gives all students, including SWDs, equal opportunities to learn (CAST 2014). This is because at the heart of UDL is addressing diverse learners' individual differences within the general education environment (Chita-Tegmark *et al*. 2011) and the UDL's principle of 'multiple means of action and expression' can best achieve this goal (Dalton *et al*. 2012) as it enjoins educators to 'use strategies that allow the learner to practice tasks with different levels of support and to demonstrate their knowledge and skills in a diversity of ways' (Dalton *et al*. 2012: 3).

Non-inclusive Curriculum

Given the diverse backgrounds of students, HEIs in South Africa have been called to ensure that their curricula validate and give voice to students' diverse range of experiences and identities (Quinlan & Sayed 2016). Against this background, advocates of UDL propose that the principle of 'multiple means of representation' can help lecturers best address this challenge (Dalton *et al*. 2012). Through employing the principle of 'multiple means of representation', 'the teacher can present, for example, the learning materials through a variety of media (visual, auditory or tactile), and provide multiple examples that can be modified in complexity to meet a range of learning needs' (Dalton *et al*. 2012: 3). However, the findings of the present study show that the South African HE environment is not yet conducive for many lecturers to inform their curriculum with this UDL principle (Dalton *et al*. 2012). For instance, Matshedisho's (2007) study of SWDs found that their lecturers were resisting using alternative, accessible teaching methods and learning and assessment formats as they either did not consider doing so as part of their academic duties or were simply ignorant of these issues.

Lyner-Cleophas *et al*. (2014) has argued that, despite South Africa having well-developed disability legislative and policy frameworks, the implementation of these on the part of lecturers in order to achieve full disability inclusion has been slow. Similarly, other studies have attributed the lecturers' inability to accept the responsibility of establishing inclusive learning environments to their lack understanding of South African legislation and institutional policies relating to SWDs (van Jaarsveldt & Ndeya-Ndereya 2015). Some lecturers sampled in Lyner-Cleophas's (2016) study justified their failure to adequately engage with and support SWDs on the basis that they were ill-

prepared to teach SWDs. This has resulted in some lecturers intentionally dodging their responsibility to support SWDs by constantly referring SWDs to Disability Units (van Jaarsveldt & Ndeya-Ndereya, 2015; see also Howell 2005). DUSMs from various South African universities themselves have complained about lecturers' constant referral of SWDs to Disability Units as unjustifiably increasing the workload of these Units, which are already understaffed and struggling to cope with job burnout (Chiwandire 2020).

Some of the South African studies have shown that, rather than embracing curriculum inclusive practices, some lecturers are rather resorting to shifting the blame on SWDs. Howell's (2006) study, for instance, found that some lecturers' resistance to the idea of delivering a flexible and accessible curriculum stemmed from their erroneous association of students' disability with incapability. Likewise, Ndlovu &Walton's (2016: 4) study concluded that lecturers' reluctance to support SWDs often emanated from their 'negative perceptions of the capabilities of students with disabilities and low expectations of their academic performance.' This is exacerbated by the fact that lecturers within South African HEIs 'are allowed to choose whether they want to 'help' disabled students or not' (Matshedisho 2007:689).

Some of the South African literature tends to blame SWDs for not being proactive enough in communicating their learning needs and curriculum adaptation requests to their lecturers. In particular, this body of literature has blamed the academic failure of SWDs on their lack of self-advocacy skills[2] (van Jaarsveldt & Ndeya-Ndereya 2015; Swart & Greyling 2011; Lyner-Cleophas 2016). Other studies have also particularly blamed SWDs who have not self-disclosed their disability for creating a stumbling block for themselves to accessing the curriculum. The rationale behind this body of literature is that disability disclosure is essential if SWDs are to be able to officially receive the appropriate services and supports within the curriculum from their lecturers or through their Disability Units (Mutanga 2013; Lyner-Cleophas 2016; Chiwandire 2020).

Studies of SWDs have reported on how lecturers' negative attitudes towards teaching an inclusive curriculum has particularly negatively impacted

[2] Within the HE context and disability inclusion debates, Vaccaro *et al*. (2015: 673) have defined self-advocacy as the student's 'ability to communicate one's needs and wants and to make decisions about the supports necessary to achieve them'.

on the retention and academic success of students with such invisible disabilities, such as psychiatric conditions and specific learning disabilities like dyslexia. In particular, these SWDs have complained about how they felt that they are often being misunderstood by some of their lecturers who forget or doubt the need for support under the assumption that they are faking their disabilities (Chiwandire 2020; Chiwandire 2017; Lyner-Cleophas 2016). Lyner-Cleophas's (2016) study also found that some lecturers spoke about being ill-prepared to support SWDs, or that they did not know how to best practically support SWDs because of insufficient training and information regarding diverse disabilities. In other studies of SWDs, these participants have attributed lecturers' failure to make necessary provisions in the curriculum to their lack of disability awareness (Matshedisho 2010; Haywood 2014).

In contrast, studies in the US have shown that lecturers who have received adequate training in implementing UDL principles provide an inclusive curriculum which supports the diverse learning needs of both SWDs and non-disabled students. Schelly *et al*.'s (2011:24) study on student perceptions of faculty implementation of UDL is the case in point; some of the student participants found that their lecturers 'used significantly more UDL strategies following the UDL training compared to the student responses before training'. This mainly took the form of lecturers providing 'more course materials in multiple formats and representations, making the material more accessible for all students' (Schelly 2011: 24-25).

Inclusive Curriculum

Recent years have witnessed the burgeoning of South African literature that indicates a growing interest on the part of some (predominantly minority) lecturers taking proactive measures in delivering a curriculum that is also inclusive of the learning needs of SWDs. A study by Mayat & Amosun (2011), which explored the University of Kwa-Zulu Natal's lecturers' perceptions towards accommodating SWDs in a Civil Engineering Undergraduate Program, is the case in point. This study found that a number of participants 'expressed the willingness to admit and accommodate students with disabilities in the undergraduate civil engineering program' (Mayat & Amosun 2011: 58). This was further evidenced by the participants' willingness to make appropriate adjustments at the levels of curriculum, pedagogy and assessment (Mayat & Amosun 2011). Similarly, a 2015 study of the University of Free

State academic staff members, conducted by van Jaarsveldt & Ndeya-Ndereya (2015), found that the minority of these participants displayed positive attitudes towards supporting SWDs. This indicates that although South Africa has numerous disability policies that provide rights for SWDs to access inclusive education, these policies still lack guiding frameworks, which 'results in universities approaching disability differently, resulting in ad hoc and uncoordinated efforts towards disability matters' (Mutanga & Walker 2017: 8). This has also been exacerbated by the fact that most HEIs do not have structures in place that hold to account lecturers who do not adhere to their legislation, policies and procedures relating to inclusive education (van Jaarsveldt & Ndeya-Ndereya 2015).

Similar findings have also been reported in studies on the experiences of SWDs. Swart & Greyling's (2011) study, which aimed to obtain an in-depth understanding of how SWDs experienced participation at their university, found that students in the Humanities and Social Sciences experienced more curriculum support and adaptations from their lecturers than students in the Natural Sciences and Economic and Business Sciences. Similar issues were also reported by SWDs sampled at Rhodes University (Chiwandire 2017) and Stellenbosch University (Lyner-Cleophas 2016), as they reported that lecturers in the Humanities were more willing to support SWDs in the curriculum in comparison to lecturers in the Sciences. Lecturers making efforts to embrace diversity in their classrooms have been appreciated by their SWDs, as shown by other studies. For instance, SWDs sampled in Matshedisho's (2010) study spoke positively about some of their lecturers for making efforts to respond to academic needs of SWDs through providing alternative styles of teaching that are sensitive to SWDs. Although these lecturers holding positive attitudes towards attempting to teach an inclusive curriculum should be acknowledged, I caution against the potential of them delivering an insufficient one-size-fits-all curriculum approach to supporting SWDs; especially those lecturers who did not receive training in UDL principles. This one-size-fits-all approach has been criticised for being problematic in that it fails to recognise the heterogeneity within the PWDs, which has the danger of lecturers failing to meet the diverse needs of students with different types of disabilities. Mutanga and Walker (2017; see also Mutanga 2017) have also further criticised South African lecturers who uses this 'one-size-fits-all' approach as unjustifiably treating SWDs as a homogenous category – a prejudice which results in overlooking the varied experiences of SWDs.

Although lecturers who are willing to prioritise the needs of SWDs to access the curriculum are important exemplars of best practices within the South African HE context, a lecturer's positive attitude alone does not necessarily guarantee his or her utilisation of effective teaching and assessment practices informed by UDL principles. To achieve an inclusive classroom, recent literature has cautioned educators that inclusive education is not the 'specialised kind of teaching and classroom accommodation that is afforded learners with disabilities only' (British Council 2018: 1). Rather, educators should view it as good quality teaching for diverse learners in the general classroom setting (British Council 2018). In other words, this recent literature enjoins lecturers not to pay attention only to SWDs to the extent that they forget to also address the educational needs of non-disabled students, and thus it is also important for South African lecturers to avoid running a similar risk. This is because doing so will be as good as reinforcing the oppressive and exclusionary culture of segregatory special schools, which historically isolated SWDs from their non-disabled counterparts (Barton 1997).

Against this background, employing the UDL's principle of 'multiple means of engagement', which places emphasis on 'creating interesting learning opportunities that motivate and stimulate learners according to their personal backgrounds and interests', can provide lecturers with fruitful guidance in this process (Dalton *et al*. 2012:3). Informing the curriculum with this principle is important, especially given the findings from South African studies of SWDs that indicate that these students are experiencing marginalisation and isolation from their non-disabled peers in the classroom setting (Swart & Greyling 2011; Ramakuela & Maluleke 2011; Chiwandire 2017). In particular, Chiwandire's (2020) doctoral study shows how SWDs themselves also feel misunderstood even by their non-disabled student peers, who discriminate against the former by resisting making friends and doing group work or assignments with SWDs.

Hence, such UDL-oriented teaching strategies as cooperative learning will be worth employing in this regard if lecturers are to create this positive academic and social success for both SWDs and their non-disabled peers. This is because UDL principles can help students to be self-motivated and thus successful in their studies (Black *et al*. 2015). Katherine (2016: 9) defines cooperative learning as 'a method that takes place in a classroom using small groups and collaboration between students'. Central to cooperative learning are characteristics which include: 'positive interdependence, individual accountability, face-to face interaction, social skills, and evaluation of the

group processing', all of which are important in promoting the engagement and academic success of all students within a group (Altun 2015 cited in Taylor 2016: 27-28).

Discussion

Although under the South African Constitution and several disability policies SWDs should have a right to access a flexible and accessible curriculum in the classroom setting, the findings of the present study indicate that is still not a reality, and thus clearly show that 'policy is not practice' (Jansen 2004: 126). This is particularly true of how most of the sampled South African HEIs still reinforce ableism[3] in the curriculum and disabling practices that hinder the equal participation of SWDs in the curriculum. This has been attributed to the lack of coordinated efforts between relevant stakeholders such as lecturers, DUSMs and the university management personnel. In particular, at both national and institutional level, there is an absence of effective monitoring mechanisms to ensure that involved stakeholders actually honour their responsibilities regarding supporting SWDs to access the curriculum. This has created a fertile ground for some lecturers and university management personnel to constantly claim that they are still unaware of their legal obligations to support SWDs in the curriculum, and this has put the academic success of the latter jeopardy in many ways.

For instance, lecturers holding negative attitudes towards disability who consistently refer their SWDs to Disability Units increase rather than solve curriculum issues. This is because although DUSMs at South African campuses have been commended for playing an important advocacy role and liaising with various university departments on how to best address the academic needs of SWDs (Howell 2005: 61), this does not necessarily mean that DUSMs are professionally equipped in UDL principles or have professional expertise in practically teaching SWDs. Hence, I agree with Mutanga's (2017: 145) suggestion that 'Disability Units should not be seen as the only way of responding to the needs of students with disabilities'. Rather,

[3] Campbell (2001: 44) has defined ableism as 'a network of beliefs, processes and practices that produces a particular kind of self and body (the corporeal standard) that is projected as the perfect, species-typical and therefore essential and fully human'.

the university management should also work in collaboration with lecturers, DUSMs and other relevant stakeholders on how to best facilitate the provision of professional development courses in UDL that target lecturers from all academic faculties. The university management in some Canadian (Kumar & Wideman 2014) and US (Langley-Turnbaugh *et al*. 2013) HEIs have already resorted to offering their lecturers training and professional development courses aimed at promoting UDL as a valuable instructional design framework. This comes as a direct influence of the obligations imposed by these countries' disability laws; obligations that are not often respected by the South African university management.

The study also found that lecturers resisting developing and delivering an inclusive curriculum are those with predetermined or negative biases that assume SWDs are incapable of performing well academically like their non-disabled peers. In addition to that, previous South African literature has rather put the blame on SWDs for lacking self-advocacy skills and for not officially disclosing their disability as a self-imposed hindrance to accessing the curriculum. However, the present study criticises this view as narrow and perpetuating social injustice, because the reality is that 'universal design for learning is not always implemented, and the student cannot be expected to take the blame when such systems fail' (Osborne 2019: 229). This reality has also been evidenced by South African SWDs themselves (particularly those involved in disability campus activism) through voicing their concerns about their universities' perpetuation of the perception that accommodating SWDs is a favour, rather than a Constitutional right (Dirk 2016; Macupe 2017). As far as disability disclosure is concerned, it is worth noting that if lecturers were to inform their curriculum with UDL principles right from the outset, such curriculum can also benefit even those SWDs who choose not to disclose their disabilities (Schelly *et al*. 2011: 24).

The lack of a co-ordinated involvement of the university management, especially in relation to facilitating the provision of professional development courses in UDL that target lecturers, has also been identified as a major barrier hindering the full inclusion of SWDs in the curriculum. This is because, rather than the university management also being proactively involved in issues of disability inclusion as they are required by law, they have rather shifted this responsibility to lecturers. This has especially been the case with the university management who do not make an effort to familiarise themselves with their individual institution's transformation strategic intentions towards addressing

disability inclusion issues (Howell 2015). Thus, such university management personnel's expectations on lecturers have failed to materialise because, as suggested by Edyburn's (2010), in order for lecturers to practically operationalise UDL principles in their teaching practices they should first receive adequate training in creating UDL products, which many South African HEIs are failing to provide. The importance of offering training in UDL to lecturers has been confirmed by empirical studies which found that positive effects of training lecturers in the use of UDL in their teaching can increase their willingness to implement UDL principles in their university classrooms (Schelly *et al*. 2011: 24). Thus, without adequate training in UDL most of the South African lecturers will always remain ill-prepared to effectively support SWDs in the curriculum.

Although the present study acknowledges the good intentions and efforts being made by the minority of lecturers who are supporting SWDs in the curriculum, there is still a need to provide them with appropriate institutional support. Such institutional support should take the form of providing additional UDL-based training to these lecturers so they can avoid teaching a one-size-fits-all curriculum or a curriculum focusing mainly on teaching SWDs at the cost of their non-disabled peers. Such institutional support should be provided in the form of professional development workshops in UDL, as these are essential for lecturers' pedagogical improvement (Orr & Hammig 2009). This is because academic staff members' long-term teaching experience, having a disability or having personal interest in supporting SWDs in the curriculum does not necessarily guarantee that they will design and teach an inclusive curriculum. Rather, it is only after acquiring training in UDL principles that South African lecturers can potentially develop and teach what Curry (2003) refers to as a learner-centred curriculum, which selects flexible, usable and accessible tools and thus creates an enabling classroom environment that is functional for all students. This is evidenced by the findings from one study of University of Southern Maine's sixteen lecturers who participated in a five-year programme of UDL education, implementation, evaluation and dissemination (Langley-Turnbaugh *et al*. 2013). In that study, these lecturers appreciated their participation in the programme of UDL education as an eye opener that enabled them to effectively operationalise UDL principles in a way which positively provided both their SWDs and non-disabled students equal opportunities to succeed academically in their classrooms (Langley-Turnbaugh *et al*. 2013). This is particularly evidenced by

one participant, a long-time professor who argued that professional development in UDL 'has had a transformative impact on nearly all aspects of my teaching' (Langley-Turnbaugh *et al*. 2013: 21).

Conclusion

Within Disability Studies, recent years have witnessed the burgeoning of literature that challenges the deficit discourse in quite remarkable ways, and this has positively opened up new avenues for scholarship in this field. Nwokorie & Devlieger (2019) in particular have recently critiqued discourses of empowerment of PWDs for framing disability mainly in terms of deficit, stating that these are disempowering because they conceal the personal lived experiences of this group. Rather, instead of thinking about disability in terms of the deficit medicalised model of disability, a social model of disability has been put forward as an empowering alternative approach that presents disability in terms of full range of experiences that are shaped by personal context, environmental barriers and everyday assumptions (Block *et al.* 2015). From the findings of the present study, I suggest that this should take the form of the university managements' involvement in empowering their lecturers to constantly 'improve their teaching methods and update course content to deliver high quality education to students' (Dužević *et al*. 2014: 233). Recent literature has suggested the importance of the involvement of the top university management in achieving systematic dialogue in transformation and disability inclusion initiatives at South African HEIs (Lyner-Cleophas 2019). To date, this has not fully materialised because of the continual absence of the university managements' voices in South African HE literature's debates on disability inclusion matters, and this has been raised as a matter of concern by Mutanga (2017).

The aim of the present study was to understand whether or not lecturers design and deliver instruction in accordance with UDL's three core principles. By employing UDL as theoretical lens, the present study yielded findings which have added new knowledge about disability inclusion and curriculum in HE not only in the context of South Africa, but in ways that are of more general significance. In particular, the present study has added new insights into broadening our understanding about issues of disability inclusion and the curriculum through unearthing hidden disabling barriers impeding equal access opportunities to the curriculum for SWDs in South African HEIs. Unlike

previous literature, which have often blamed lecturers, DUSMs and SWDs for curriculum failings in HE, the present study has identified the university management personnel's lack of political will to invest in professional development courses in UDL as the major disabling barrier to providing a conducive environment for lecturers to be trained on how to design and deliver an inclusive curriculum. This is because the present study's findings have shown that although UDL principles have a potential of transforming HE curriculum, without HEIs providing professional development courses in UDL, most South African lecturers will remain ill-equipped with practicalities of how to operationalise the three principles of UDL in practice if they are to deliver the inclusive environments.

Given this importance of the need to involve the university management, I propose new recommendations which radically move away from how disability inclusion and curriculum practices have traditionally been understood within the South African HE context. This is because previous studies have failed to provide concrete solutions aimed at mitigating these challenges by shifting away attention from the university managements' failings and incompetencies in dealing with issues of disability inclusion. Rather, the dominant finding in previous South African literature has mainly been placing emphasis on the need for universities to sensitise lecturers on disability issues if they are to support SWDs. This finding was also recently confirmed by Makiwane's (2018: 792-793) study of 20 SWDs on four campuses of Walter Sisulu University, who also recommended the need for these campuses to conduct disability awareness workshops aimed at training lecturers on how to handle and assess SWDs in the classroom. In the present study, I propose a move away from this dominant finding by enjoining South African HEIs to rather invest in holding workshops aimed at training lecturers on how to practically design and deliver the curriculum informed by UDL principles. Such UDL workshops can potentially have multiple beneficial outcomes not only for lecturers who hold negative attitudes towards SWDs, but also for lecturers who are willing to teach an inclusive curriculum, but lack knowledge on how to practically design and deliver curricula which address the learning needs of diverse SWDs. This is because a curriculum informed by UDL principles has been applauded for not only addressing the learning needs of students with mild or moderate disabilities, but also for those with severe disabilities whom most educators are always shying away from supporting (Hartmann 2015).

In conclusion, although the current South African literature only places much expectations on lecturers, SWDs and DUSMs to be the only stakeholders to facilitate curriculum accessibility issues in South African HEIs, the present study has added new knowledge by arguing that such issues are beyond the control of these stakeholders. Rather, there is also an urgent need for the university management personnel to be actively involved in initiating campus-wide involvement in disability inclusion promotion (Marks 2008). In particular, this should take the form of funding professional development courses in UDL that target lecturers from all academic faculties. It is hoped that such professional development courses in UDL will help educate these lecturers on how to operationalise such UDL principles as 'multiple means of representation'; 'multiple means of action and expression' and 'multiple means of engagement' in order to design and deliver the curriculum that addresses all students with diverse learning needs. Given the dearth in literature on the experiences of the management, there is a need for future qualitative studies to also focus on sampling this group specifically on measures they are taking in supporting SWDs in accessing the curriculum, among other things, as previous studies have ignored this important aspect.

References

Ainscow, M., A. Dyson, T. Booth & P. Farrell. 2006. *Improving Schools, Developing Inclusion.* London: Routledge. https://doi.org/10.4324/9780203967157

Anstead, M.E.J. 2016. *Teachers' Perceptions of Barriers to Universal Design for Learning*. Unpublished Doctoral Thesis. Walden University. Minneapolis.

Avissar, G. 2011. Inclusive Education in Israel from a Curriculum Perspective: An Exploratory Study. *European Journal of Special Needs Education* 27,1: 35 - 49. https://doi.org/10.1080/08856257.2011.613602

Artiles, A.J., N. Harris-Murri & D. Rostenberg 2006. Inclusion as Social Justice: Critical Notes on Discourses, Assumptions, and the Road Ahead. *Theory into Practice* 45,3: 260 - 268. https://doi.org/10.1207/s15430421tip4503_8

Anderson, R. 2019. Application of Universal Design for Learning (UDL)

Principles in Face-to-Face and Online Post-Secondary Education Courses. Available at: https://www.researchgate.net/profile/Reid_Anderson3/publication/326274393_Universal_Design_Learning_UDL_in_Higher_Education/links/5c887c4445851564fad9d2a2/Universal-Design-Learning-UDL-in-Higher-Education.pdf (Accessed on 13 August 2019.)

Altun, S. 2015. The Effect of Cooperative Learning on Students' Achievement and Views on the Science and Technology Course. *International Electronic Journal of Elementary Education* 7,3: 451 - 467.

Badat, S. 2010. *The Challenges of Transformation in Higher Education and Training Institutions in South Africa*. Paper Commissioned by the Development Bank of Southern Africa.

Barton, L. 1997. Inclusive Education: Romantic, Subversive or Realistic? *International Journal of Inclusive Education* 1,3: 231 - 242. https://doi.org/10.1080/1360311970010301

Bowen, G. 2009. Document Analysis as a Qualitative Research Method. *Qualitative Research Journal 9*,2: 27 - 40. https://doi.org/10.3316/QRJ0902027

British Council. 2018. *The Inclusive Teacher*. *Teaching for All: Mainstreaming Inclusive Education in South Africa*. Student Book. Johannesburg: South Africa.

Booth, T. 1996. A Perspective on Inclusion from England. *Cambridge Journal of Education* 26,1: 87 - 99. https://doi.org/10.1080/0305764960260107

Bruch, P.L. 2003. Interpreting and Implementing Universal Instructional Design in Basic Writing. In Higbee, J.L. (ed.): *Curriculum Transformation and Disability: Implementing Universal Design in Higher Education.* University of Minnesota, Minneapolis, MN: Center for Research on Developmental Education and Urban Literacy. Available at: http://reforma.fen.uchile.cl/Papers/Curriculum%20Transformation%20HD%201-Higbee.pdf (Accessed on 13 November 2019.)

Block, P., D. Kasnitz, A. Nishida & N. Pollard 2015. Occupying Disability: An Introduction. In Block, P., D. Kasnitz, A. Nishida & N. Pollard (eds): *Occupying Disability: Critical Approaches to Community, Justice, and Decolonizing Disability*. New York: Springer International Publishing. https://doi.org/10.1007/978-94-017-9984-3

Canadian Ministry of Education 2009. *Realising the Promise of Diversity: Ontario's Equity and Inclusive Education Strategy*. Ontario: Ministry of Education.

Campbell, F. 2009. *Contours of Ableism: The Production of Disability and Abledness*. London: Palgrave Macmillan. https://doi.org/10.1057/9780230245181

Campbell, D.M. 2004. Assistive Technology and Universal Instructional Design: A Postsecondary Perspective. *Equity & Excellence in Education* 37, 2:167-173. https://doi.org/10.1080/10665680490454057

Center for Applied Special Technology (CAST) 2014. *The Concept of UDL*. Wakefield, MA: Author. Available at: http://www.udlcenter.org/aboutudl/whatisudl/conceptofudl (Accessed on 14 April 2019.)

Center for Applied Special Technology (CAST) 2010. *UDL Questions and Answers*. Available at: http://www.cast.org/research/faq/index.html (Accessed on 13 April 2019.)

Curry, C. 2003. Universal Design Accessibility for All Learners. *Educational Leadership* 61,2: 55 - 60.

Chataika, T., J.A. Mckenzie, E. Swart & M. Lyner-Cleophas. 2012. Access to Education in Africa: Responding to the United Nations Convention on the Rights of Persons with Disabilities. *Disability & Society* 27,3: 385 - 398. https://doi.org/10.1080/09687599.2012.654989

Chard, G. & R. Couch. 1998. Access to Higher Education for the Disabled Student: A Building Survey at the University of Liverpool. *Disability & Society* 13,4: 603 - 623. https://doi.org/10.1080/09687599826632

Chiwandire, D. & L. Vincent. 2019. Funding Mechanisms to Foster Inclusion in Higher Education Institutions for Students with Disabilities. *African Journal of Disability* 8: 1 - 12. https://doi.org/10.4102/ajod.v8i0.336

Chiwandire, D. 2020. '*Munhu wese ihama yako* (*Everyone is Your Relative*)': *Ubuntu and the Social Inclusion of Students with Disabilities at South African Universities*. Unpublished Doctoral thesis. Rhodes University. Grahamstown. South Africa.

Chiwandire, D. 2017. *Disability Report on Research Conducted into Experien-*

ces of Rhodes University Students and Staff with Disabilities. Research Commissioned by the Equity and Institutional Culture Office. Unpublished Consultative Report. Rhodes University, Grahamstown. South Africa.

Chita-Tegmark, M., J.W. Gravel, M.B. Serpa, Y. Domingos & D.H. Rose 2011. Using the Universal Design for Learning Framework to Support Culturally Diverse Learners *Journal of Education* 192,1: 17 - 22. https://doi.org/10.1177/002205741219200104

Dalton, E.M., J.A. Mckenzie & C. Kahonde 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: 1 - 7. https://doi.org/10.4102/ajod.v1i1.13

DoE, R.S.A. 1997. Education White Paper 3: A Programme for Higher Education Transformation. *Government Gazette* 390: 18515.

DoE, R.S.A. 2001. Education White Paper 6: *Special Needs Education. Building an Inclusive Education and Training System*. Pretoria, South Africa: Department of Education.

Donohue, D. & J. Bornman. 2014. The Challenges of Realising Inclusive Education in South Africa. *South African Journal of Education* 34,2:01-14. https://doi.org/10.15700/201412071114

Dužević, I., H. Miloloža, & M. Delić 2014. Application of Focus Group Interviews for Business Curriculum Development in Higher Education. *Mediterranean Journal of Social Sciences* 5,13: 229 - 234. https://doi.org/10.5901/mjss.2014.v5n13p229

Department of Higher Education and Training (DHET) 2018. *Strategic Policy Framework on Disability for the Post-School Education and Training System*. DHET. Pretoria: Government Printers.

Department of Higher Education and Training (DHET) 2013. *White Paper on Post-School Education and Training*. Pretoria: Government Printers.

Dirk, N. 2016. 'UCT "Not Friendly to the Disabled"'. 27 January 2016. Available at: http://www.iol.co.za/news/south-africa/western-cape/uct-not-friendly-to-the-disabled-1976221 (Accessed on 9 April 2018.)

Edna, Z. 2016. *Attitudes towards Students with Disabilities in Higher Education, is there any Change*? The European Proceedings of Social and Behavioural Sciences. Future Academy: Bankstown. Available at:

https://www.futureacademy.org.uk/files/images/upload/ERD2016FA079F.pdf (Accessed on 13 November 2019.) https://doi.org/10.15405/epsbs.2016.12.79

Edyburn, D.L. 2010. Would You Recognize Universal Design for Learning if you Saw it? Ten Propositions for New Directions for the Second Decade of UDL. *Learning Disability Quarterly* 33,1: 33 - 41. https://doi.org/10.1177/073194871003300103

Fuller, M., M. Healey, A. Bradley & T. Hall 2004. Barriers to Learning: A Systematic Study of the Experience of Disabled Students in One University. *Studies in Higher Education* 29,3: 303 - 318. https://doi.org/10.1080/03075070410001682592

Foundation of Tertiary Institutions of the Northern Metropolis (FOTIM) 2011. *Disability in Higher Education: Project Report*. Available at: http://www.students.uct.ac.za/usr/disability/reports/annual_report_10_11.pdf. (Accessed on 9 August 2019.)

Hartmann, E. 2015. Universal Design for Learning (UDL) and Learners with Severe Support Needs. *International Journal of Whole Schooling* 11,1:54 - 67.

Hatlen, P. 1996. The Core Curriculum for Blind and Visually Impaired Students, Including Those with Additional Disabilities. *Review* 28,1: 25 - 32.

Haywood, C. 2014. *The Opinions of Lecturers at a University of Technology Regarding their Role in Supporting Students Experiencing Barriers to Learning*. Master's Thesis. North West University. Vanderbijlpark.

Howell, C. 2005. *Higher Education Monitor: South African Higher Education Responses to Students with Disabilities: Equity of Access and Opportunity*. Pretoria: Council on Higher Education.

Howell, C. 2006. Disabled Students and Higher Education in South Africa. In Watermeyer. B., L. Swartz, T. Lorenzo, M. Scheneider & M. Priestly (eds): *Disability and Social Change*. Cape Town: Human Science Research Council.

Howell, C. 2015. *Guidelines for the Creation of Equitable Opportunities for People with Disabilities in South African Higher Education*. Cape Town: Cape Higher Education Consortium.

Imrie, R. & P. Hall. 2001. An Exploration of Disability and the Development Process. *Urban Studies* 38,2: 333 - 350. https://doi.org/10.1080/00420980124545

Jansen, J. 2017. Decolonising the University Curriculum Given a Dysfunctional School System? *Journal of Education* 68: 1 - 14.

Jansen, J. 2004. Race and Education after Ten Years: Conversations. *Perspectives in Education* 22,1: 117 - 128.

Kumar, K.L. & M. Wideman 2014. Accessible by Design: Applying UDL Principles in a First Year Undergraduate Course. *Canadian Journal of Higher Education* 44,1: 125 - 147.

Lange, L. 2014. Rethinking Transformation and Its Knowledge(s): The Case of South African Higher Education. *Critical Studies in Teaching and Learning* 2,1: 1 - 24.

Langley-Turnbaugh S.J., M. Blair & J. Whitney 2013. Increasing Accessibility of College STEM Courses through Faculty Development in UDL. In Burgstahler, S. (ed.): *Universal Design in Higher Education: Promising Practices.* Seattle: DO-IT, University of Washington. Available at: https://www.washington.edu/doit/increasing-accessibility-college-stem-courses-through-faculty-development-universal-design-learning (Accessed on 2 October 2019.)

Lyner-Cleophas, M. 2019. Assistive Technology Enables Inclusion in Higher Education: The Role of Higher and Further Education Disability Services Association. *African Journal of Disability* 8, 6: 1 - 6. https://doi.org/10.4102/ajod.v8i0.558

Lyner-Cleophas, M.M. 2016. *Staff and Disabled Students' Experiences of Disability Support, Inclusion and Exclusion at Stellenbosch University*. Unpublished Doctoral thesis. Stellenbosch: Stellenbosch University.

Lyner-Cleophas, M., E. Swart, T. Chataika & D. Bell 2014. Increasing Access into Higher Education: Insights from the 2011 African Network on Evidence-to-Action on Disability Symposium–Education Commission. *African Journal of Disability* 3,2: 1 - 3. https://doi.org/10.4102/ajod.v3i2.78

MCGuire-Schwartz, M.E. & J. S. Arndt 2007. Transforming Universal Design for Learning in Early Childhood Teacher Education from College Classroom to Early Childhood Classroom. *Journal of Early Childhood Teacher Education* 28,2: 127 - 139. https://doi.org/10.1080/10901020701366707

Marks, J. 2008. Post-Secondary Education Disability Services in the United States Available at: http://www.dinf.ne.jp/doc/english/resource/dss_um.html.

(Accessed on 12 August 2019.)

Makiwane, N.B. 2018. Prioritising Support Services to Students with Disabilities in a University. *Journal of Public Administration* 53,3: 786 - 794.

Macupe, B. 2017. Students Say 'Disability-Friendly' Varsity is Anything But. 27 October 2017. Available at: https://mg.co.za/article/2017-10-27-00-students-say-disability-friendlyvarsity-is-anything-but. (Accessed on 4 October 2018.)

Mayat, N. & S.L. Amosun 2011. Perceptions of Academic Staff towards Accommodating Students with Disabilities in a Civil Engineering Undergraduate Program in a University in South Africa. *Journal of Postsecondary Education and Disability* 24,1: 53 - 59.

Matshedisho, K.R. 2007. The Challenge of Real Rights for Disabled Students in South Africa. *South African Journal of Higher Education* 21,4: 706 - 716. https://doi.org/10.4314/sajhe.v21i4.25692

Matshedisho, K.R. 2010. Experiences of Disabled Students in South Africa: Extending the Thinking Behind Disability Support. *South African Journal of Higher Education* 24,5: 730 - 744.

Moriña, A., M.D. Cortés & N. Melero 2014. Inclusive Curricula in Spanish Higher Education? Students with Disabilities Speak Out. *Disability & Society* 29,1: 44 - 57. https://doi.org/10.1080/09687599.2013.769862

Mitchell, D. 2010. *Education that Fits: Review of International Trends in the Education of Students with Special Educational Needs*. Final Report. University of Canterbury.

Mittler, P. 2000. *Working Towards Inclusive Education. Social Contexts*. London: David Fulton.

Mutanga, O. 2019. S*tudents with Disabilities and the Transition to Work: A Capabilities Approach*. London: Routledge. https://doi.org/10.4324/9780429465208

Mutanga, O. 2017. South Africa's Universities Can Do More to Make Disabled Students Feel Included 17 January 2017. *The Conversation*. Available at: https://theconversation.com/south-africas-universities-can-do-more-to-make-disabled-students-feel-included-70672. (Accessed on 6 May 2018.)

Mutanga, O. & M. Walker. 2017. Exploration of the Academic Lives of Students with Disabilities at South African Universities: Lecturers' Perspectives. *African Journal of Disability* 6,1: 1 - 9. https://doi.org/10.4102/ajod.v6i0.316

Mutanga, O. 2015. *Experience of Disabled Students at Two South African Universities: A Capabilities Approach*. Unpublished Doctoral thesis. Bloemfontein: University of the Free State.

Mutanga, O. 2013. 'I am a university student, not a disabled student': Conceptualising Identity and Social Justice in South African Higher Education through the Capabilities Approach Lens. *Journal of Educational Studies* 12,1: 76 - 88.

Msila, V. 2007. From Apartheid Education to the Revised National Curriculum Statement: Pedagogy for Identity Formation and Nation Building in South Africa. *Nordic Journal of African Studies* 16,2: 146 - 160.

Ntombela, S. & R. Soobrayen 2013. Access Challenges for Students with Disabilities at the University of KwaZulu-Natal: A Situational Analysis of the Edgewood Campus. *Journal of Social Sciences* 37,2: 149 - 155. https://doi.org/10.1080/09718923.2013.11893213

Ntombela, S. 2013. Inclusive Education and Training in South African Higher Education: Mapping the Experiences of a Student with Physical Disability at University. *Africa Education Review* 10,3:483 - 501. https://doi.org/10.1080/18146627.2013.853541

Ndlovu, S. & E. Walton. 2016. Preparation of Students with Disabilities to Graduate into Professions in the South African Context of Higher Learning: Obstacles and Opportunities. *African Journal of Disability* 5,1: 1 - 8. https://doi.org/10.4102/ajod.v5i1.150

Nwanze, I. 2016. *How Can We Include Disability Issues in Undergraduate Curricula at the University of Cape Town.* Unpublished Doctoral Thesis. Cape Town: University of Cape Town.

Nwokorie, O.V. & P.J. Devlieger 2019. 'We Only Got Coca-Cola': Disability and the Paradox of (Dis)Empowerment in Southeast Nigeria. *African Journal of Disability* 8: 1 - 13. https://doi.org/10.4102/ajod.v8i0.444

Ohajunwa, C. 2012. *A Study to Determine the Extent and Nature of Disability Inclusion Within the Curriculum of the Faculty of Humanities, University of Cape Town.* Unpublished Doctoral Thesis, Cape Town: University of Cape Town.

Ohajunwa, C., J. Mckenzie, A. Hardy & T. Lorenzo. 2014. Inclusion of Disability Issues in Teaching and Research in Higher Education. *Perspectives in Education* 32, 3: 104 - 117.

Ohajunwa, C., J. Mckenzie & T. Lorenzo 2015. Enabling Disability Inclusive Practices within the University of Cape Town Curriculum: A Case Study. *African Journal of Disability* 4,1: 1 - 8. https://doi.org/10.4102/ajod.v4i1.157

Osborne, T. 2019. Not Lazy, Not Faking: Teaching and Learning Experiences of University Students with Disabilities. *Disability and Society* 34,2: 228 - 252. https://doi.org/10.1080/09687599.2018.1515724

Orr, A.C. & S.B. Hammig 2009. Inclusive Postsecondary Strategies for Teaching Students with Learning Disabilities: A Review of the Literature. *Learning Disability Quarterly* 32,3: 181 - 196. https://doi.org/10.2307/27740367

Pretorius, A., N. Lawton-Misra, T. Healey & S. Hawking 2011. Disability: Continued Marginalisation! Paper Presented at the 34th AFSAAP Conference, 30 November-2 December. Adelaide: Flinders University.

Quinlan, O. & Y. Sayed 2016. Changing what Universities Teach is a Process, Not a Single Event. 6 June 2016. Available at: http://theconversation.com/changing-what-universities-teach-is-a-process-not-a-single-event-59327 (Accessed on 14 April 2019.)

Ramakuela N.J. & T.X. Maluleke 2011. Students' Views Regarding the Social and Learning Environment of Disabled Students at the University of Venda, South Africa. *African Journal for Physical, Health Education, Recreation and Dance* 2,1: 285 - 294.

Rose, D.H., A. Meyer, N.M. Strangman & G. Rappolt 2002. *Teaching Every Student in the Digital Age: Universal Design for Learning*. Alexandria, VA: ASCD Press.

Ryndak, D.L. & S.K. Alper 1996. *Curriculum Content for Students with Moderate and Severe Disabilities in Inclusive Settings*. Boston: Allyn and Bacon.

Swart, E. & E. Greyling 2011. Participation in Higher Education: Experiences of Students with Disabilities. *Acta Academica* 43,4: 81 - 110.

Schelly, C.L., P.L. Davies & C.L. Spooner 2011. Student's Perceptions of Faculty Implementation of Universal Design for Learning. *Journal of Post-secondary Education and Disability* 24, 1: 17 - 30.

Taylor, K. 2016. The Influence of Universal Design for Learning through Cooperative Learning and Project-Based Learning on an Inclusive Classroom. *Student Research Submissions*, 187. Available at:

https://pdfs.semanticscholar.org/6c30/73b94fefc18a0b7ca44f36ba04d2dc9293a6.pdf (Accessed on 13 November 2019.)

Tinto, V. 1982. Limits of Theory and Practice in Student Attrition. *The Journal of Higher Education* 53,6: 687 - 700. https://doi.org/10.2307/1981525

Tugli, A.K. & E.K. Klu 2014. Approaching Disability and Educational Inclusion from the 'Trinity' Model Perspective. *Mediterranean Journal of Social Sciences* 5,20: 2954. https://doi.org/10.5901/mjss.2014.v5n20p2954

Tugli, A.K., N.J. Ramakuela, D.T. Goon, F.C. Anyanwu & L.I. Zungu 2013. Perceptions of Students with Disabilities Concerning Access and Support in the Learning Environment of a Rural-Based University. *African Journal for Physical, Health Education, Recreation and Dance* (*AJPHERD*) 1,2: 356 - 364.

Van Jaarsveldt, D.E., & C.N. Ndeya-Ndereya 2015. 'It's Not My Problem': Exploring Lecturers' Distancing Behaviour Towards Students with Disabilities. *Disability & Society* 30,2: 199 - 212. https://doi.org/10.1080/09687599.2014.994701

Vaccaro, A., M. Daly-Cano & B.M. Newman 2015. A Sense of Belonging among College Students with Disabilities: An Emergent Theoretical Model. *Journal of College Student Development 56*,7: 670 - 686. https://doi.org/10.1353/csd.2015.0072

Wills, J. 2008. *Preparing All Youth for Academic and Career Readiness*. Washington, D.C.: National Collaborative on Workforce and Disability for Youth, Institute for Educational Leadership.

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