To what extent is Universal Design for Learning "universal"? A case study in township special needs schools in South Africa

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This paper reports on a study examining the current challenges of developing inclusive education as well as the potential applicability of implementing principles of Universal Design for Learning (UDL) in two township special needs schools in South Africa. The philosophy of UDL has been advocated by many educators as a means of developing inclusive classroom environments in the Western world. Despite the growing popularity of UDL, its universal application, especially in places with limited resources, has remained somewhat unquestioned. Using a theoretical framework that is critical of Western-centered understandings of inclusive education and pedagogy, this paper examines how understanding the educational circumstances and teacher knowledge of a local context can inform the applicability of UDL principles. The findings of this study reveal that despite teachers' recognition of the benefits of implementing UDL principles in their practice, the unique socioeconomic conditions in South African township schools make teachers doubt the feasibility of implementing this Western concept in their classrooms. Yet, at the same time, the findings illustrate how teachers are already employing practices that are consistent with UDL principles in an attempt to cater for the needs of diverse learners. The paper concludes by asserting the need to consider the unique economic and political contexts of the global South when determining the applicability of inclusive education strategies beyond Western contexts.

Keywords: Universal Design for Learning (UDL); inclusive education; South African township schools

Introduction

The global trend towards inclusion has been supported by international agreements and treaties, such as The Salamanca Statement and Framework for Action on Special Needs Education (UNESCO, 1994) and the UN Convention on the Rights of Persons with Disabilities (CRPD) (UN, 2006). Article 24 of the CRPD states that 'Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability'. Despite the growing international

support for inclusion, the economic, social and political conditions of individual countries pose serious barriers towards implementing inclusive education. Furthermore, both research and international discourse on inclusive education remains heavily focused on Western-contexts and there is an insufficient knowledge base regarding disability in the global South, especially as it relates to poverty (Miles and Singal, 2010; Grech, 2011).

The purpose of this paper is to examine the transnational applicability of an inclusive educational strategy that has been developed and widely used in Western settings- Universal Design for Learning (UDL). In the United States, UDL has been increasingly adopted as a philosophy and method for supporting diverse learners and implementing inclusive education (Rose, 2000; Rose and Meyer, 2002). A UDL framework¹ aims to improve learning and teaching for all people from the initial stage of curriculum development (CAST, 2011). Accordingly, curriculum based on UDL principles² attempts to proactively account for different learning styles and needs in order to benefit all learners. Despite growing attention towards UDL as an ideal tool for creating an inclusive learning environment, the transnational applicability of UDL principles has not been examined. As Davidson (2010:144) argues, 'universal design remains largely a first world concept rather than a global reality'. Considering the complexity of the historical and sociopolitical circumstances in many countries, especially in the global South, UDL- assumed to be an ideal model for implementing inclusion—may or may not be an applicable modality. It is therefore necessary to carefully consider the different meanings that ideas such as inclusion and UDL take on in global settings.

In this paper, I expand discussions about inclusive education and UDL through a case study in South Africa – a country which has increased policy in favor of inclusive education over the past two decades (Department of Education, 2001). The central objectives of the study upon which this paper is based are: 1) to examine current challenges of developing inclusive education as well as the potential applicability of UDL in South African township special schools and 2) to expand discussions with local educators about more pragmatic approaches to achieving inclusive education that take into account the unique barriers in South African township schools. To address these issues, I planned inclusive teacher workshops for special education teachers in South African township schools. I chose UDL as the primary framework of the teacher training program in order to examine the assumed universal application of UDL, and also because it may provide potential benefits to teachers and students.

Through introducing UDL principles to township special education teachers, I identified ways in which the collective voices of these teachers might question, reconsider, or reaffirm the principles of UDL, given the unique social and cultural contexts. I begin by providing some background on the politics of inclusive education in South Africa.

Inclusive education in South African township context

Township refers to underdeveloped urban areas in which non-white populations have historically resided to remain closer to their work places within the cities and towns during South Africa's apartheid period of 1948-1994 (Mampane and Bouwer, 2011). Following half a century of apartheid regime, South Africa's new democratically elected government has been pursuing efforts to improve the standard of living in townships and to increase educational equality for all children. However, township life remains strongly associated with a high rate of poverty, crime, violence, and unemployment (Prinsloo, 2007; Leoschut, 2008). Although South Africa is known as one of the most economically developed countries in Africa (IMF, 2015), its large income inequality based on a long history of racial segregation still causes children to receive unequal opportunities for a quality education (Cobham and Sumner, 2013). Today, schools in townships remain highly racially homogeneous and receive less resources compared to schools in more developed urban areas, which are primarily attended by white and more affluent students (Eloff and Kgwete 2007; Department of Basic Education, 2010;). The high school graduation rate of White African students (less than 10 % of the whole student body) is twice that of Black African students who constitute approximately 80% of the student population of the country (Bhorat, 2007).

In 2001, National Education White Paper 6 on Special Needs Education was passed in South Africa (Department of Education, 2001). This policy was intended to monitor and evaluate the goal of 'the development of an inclusive education and training system' (Department of Education, 2005b:12). Although this white paper proposed steps to create inclusive education for all learners, vast inequalities in provisions still exist across racial groups, geographical settings, and between students with and without disabilities in South Africa (Naicker, 2005; Saloojee et al., 2007). Approximately 288,000 South African school-age children with disabilities are not enrolled in school and many more children are not provided with educational services because of their race, language, health and socioeconomic issues, and an inaccessible curriculum (Daniels, 2010).

Theoretical Framework

Informed by research highlighting how lack of resources and training hinder the implementation of inclusion in South African schools (Engelbrecht et al., 2003; Jafthas, 2008; Walton, 2011; Wiazowski, 2012), I designed a study to critically question the transnational applicability of UDL. The impetus for taking a critical approach to UDL— questioning its usefulness in South African schools rather than focusing only on increasing its implementation— is rooted in a Critical Disability Studies (CDS) framework, which foregrounds the conditions of the global South. A CDS framework is used to question predominant social practices and structures that marginalize individuals who experience disability (Meekosha and Shuttleworth, 2009). While disability studies perspectives are

derived from capitalist countries, in particular Western Europe and North America, CDS moves beyond the limits of 'metropolitan thinking' that is based on experiences of a privileged minority (Connell, 2011:1372). Those who embrace CDS are particularly critical of the fact that eighty percent of the disabled population living in the global South remain on the periphery of global power or are ignored within a vast majority of disability discourses (Connell, 2011).

Therefore, CDS scholars are increasingly critical of the invisibility of perspectives from the global South in mainstream disability studies scholarship. In asserting the importance of infusing global South perspectives in disability theorizing, Meekosha (2011) emphasizes a pattern of 'northernness of disability theory' (670). She claims that disability studies in the Northern Hemisphere tends to ignore the lived experiences of disabled bodies in the global South. Grech (2009) also criticizes mainstream disability studies as being focused on Western industrialized settings based on certain ideological, theoretical, cultural, and historical assumptions. In other words, current mainstream disability studies scholarship lacks the consideration of local contexts that differ from those of the Northern Hemisphere.

The tendency of mainstream disability studies discourse to ignore the Southern Hemisphere has led scholars to overlook the consequences of colonialism. For countries on the periphery of global power, disabilities are embodied by inhabitants of lands that have a history of colonialism (Connell, 2011). This legacy has generated a cycle of disability in the wake of modern power. When analyzing issues of disability and poverty in the global South, it is necessary to consider how economic exploitation and dependency has been shaped by a history of colonization and global capitalism (Connell, 2011; Meekosha, 2011).

Scholars drawing on CDS are paying increasing attention to the relationship between material or economic conditions and the production of disability. In her book, 'Disability and Difference in Global Contexts', Erevelles (2011) uses a historical materialist framework to explain how the disabled body is created through political circumstances and capitalism. Through wars, imbalanced economic power, and modern imperialism, individuals are disabled. Therefore, as societies are more globalized, the intersectional marginalization of race, class, and geopolitical position becomes an agent of disabling the human body. Acknowledging the ways in which political and economic circumstances produce disability, disability studies scholars expand upon our long-held ways of thinking about disability. For example, the notions of 'disability pride' and celebrating 'disability as diversity' that are common in the US context (Linton, 1998), seem far less relevant when considering how war and economic exploitation disproportionally disable bodies in the global South.

Materialist disability studies (Erevelles 2011) and a global South framework (Meekosha 2011) provide the rationale for attending to the relationship between disability and poverty in non-Western settings, such as those in South African township special education schools. Mainstream disability studies research is unlikely to address the meaning of disability issues

in settings such as South African townships with their unique historical and political backgrounds. Therefore, the role of teacher participants for this research study becomes crucial because their lived experiences, not only as educators but also as local experts, bring profound insights to understand ideological, cultural, and historical uniqueness in South African townships. A global South and Critical Disability Studies framework positions participants in this study as having a form of expert knowledge about issues related to schooling and inclusion, rather than as having a deficit or gap in knowledge about the way these concepts are defined and practiced in Western settings.

Methodology

With a CDS framework in mind, this study adopted a qualitative research approach borrowing from a social constructivist framework. A social constructivist perspective emphasizes how individuals and groups construct meaning in their local worlds through multiple lived realities, resulting in a complex interpretation of their lives (Creswell, 2007). Because I was interested in examining the accessibility of UDL in a transnational setting, it was necessary to consider the unique cultural and historical conditions of special needs schools³ in South African townships. The teacher participants serve students from extremely marginalized socioeconomic backgrounds. It was therefore imperative to actively seek out the constructed meanings of disability and instructional practices of the participants when introducing Westernized concepts such as UDL (Davidson, 2010). I sought to understand participants' views about principles of UDL and how these perspectives relate to their experiences as special educators in the particular social and historical setting of a South African township. Participants' views on UDL and its applicability in a South African township were therefore an essential dimension of this qualitative study.

Research Site

The two participating special needs schools are both located in a township in the Western portion of the Eastern Cape Province in South Africa. Career School (pseudonym), serves students, predominantly Black Africans, from grade one through to seven. The focus of the school curriculum is on remediating students' literacy and math skills as well as providing vocational education. The most common disability labels given to students in Career School are 1) 'learning disability⁴,' which is typically applied to students who have experienced interrupted formal education and 2) 'emotional disability,' which typically describes behavioral issues and is applied to many students who have experienced physical or psychological abuse. Although Career School is now listed as a public school, it was originally founded by a British philanthropist to serve 'street children' in townships about 30 years ago.

Harmony School (pseudonym), the other participating school, serves students with

disabilities from ages five to twenty one. A majority of students, predominantly Black Africans, have a label of intellectual disability and other labels including autism, cerebral palsy, or multiple disabilities. Unlike the general education schooling system in South Africa, this school classifies students into a broader range of groups: primary, junior, middle junior, and vocational and skills training.

Participants

There were 15 participants in this study. Selection criteria consisted of K-12 special education teachers in South African township schools who met the following requirements: 1) had at least 3 years of teaching experience in South Africa, and 2) were currently teaching in township special needs schools. Participant recruitment took place within township special needs schools because of the high concentration of students with disabilities and because the region maintains a segregated schooling system for students with disabilities. The demographics of teacher participants is described in Table 1.

Table 1: Participant demographics

Gender		Racial background		Mother tongue		
Female	Male	Black	White	Xhosa ⁵	English	Afrikaans
12	3	11	4	11	3	1
15		15		15		

Methods

Data was collected through questionnaires, participant observations, semi-structured interviews, and field notes. At the start of the study, participants were required to complete a questionnaire about familiarity with inclusive education, UDL, and teaching strategies and supports provided to students with disabilities. Participants also participated in three one-hour teacher workshop sessions. Workshop topics included the three principles of UDL, teaching strategies based on UDL principles, disability awareness, community building activities, and instructional strategies for meeting the needs of diverse learners in South African schools. Post-workshop questionnaires included the applicability of UDL principles and teaching strategies in classroom settings based on the teachers' experiences in township special needs schools. Questionnaires also included concerns or questions about using UDL principles in their teaching.

After the workshops, participants were required to participate in one 30 minute-long semi-structured group interview. Individual in-depth semi-structured interviews with six teachers, including both principals, were also conducted. Additionally, I conducted participant observation at a local township public elementary school and both special needs schools to better understand the classroom environment and teaching strategies used in South African

classrooms. I was also invited to several informal gatherings with local teachers during my stay in South Africa, which provided me with a better sense of the everyday experiences of special educators.

Data analysis

Grounded theory was employed and guided the analysis of data (Corbin and Strauss 2008). Since the perspectives from the participants lay in the center of the data collection in my study, I followed the inductive process of developing theories from the ground up and respecting the authentic voices of participants (Bogdan and Biklen, 2007). Through following the inductive data analysis process based on the results of the questionnaires, semi-structured group interviews, and participant observation, I developed primary themes. I utilized quotes from the interviews as well as the raw data from the questionnaire results. Field notes from each interview, teacher workshop, and classroom observation guided me to be better oriented to the data through the data analysis process.

Ethics

This study met the standards of ethical review at the university I attend. My research was also reviewed, consulted, and approved by local experts in South Africa including the leader of the community engagement program at a local university, an executive director of one of the local NGOs, as well as the principals of both participating special needs schools. Informed consent was obtained from all participants. I articulated participants' rights, including voluntary participation and the right to withdraw at any time in a culturally and contextually sensitive manner. Questionnaires and all interviews were audio-recorded and then transcribed verbatim. These were de-identified before data analysis, ensuring participants' anonymity and confidentiality.

Limitations and Positionality

This study is limited by the small number of participants (15 teachers). Additionally, there is little diversity in the employment situation of teachers and is hence limited to those who work in township special needs schools which are segregated based on race and ability. Therefore, the results of this study cannot be generalized to other school contexts and cannot address the state of inclusive education practices in South Africa. My positionality as an Asian female researcher from South Korea living in the United States, also had an impactful role in this study. Coming from one of the 'first-world' countries, my research could easily be interpreted as edifying 'third-world' teachers with 'new' knowledge – a perspective I encountered during the recruitment process. To address this issue and build a relationship with participants, I was

open with participants about my own experiences as an elementary teacher in South Korea. Thereafter, I focused on continuously asking participants for their insider's view points, to demonstrate respect for their knowledge.

Key Findings

Through inductive data analysis, three key findings emerged from this study: 1) Challenges facing teachers in township special needs schools, 2) Teachers' understanding about inclusive education and segregated schooling system, and 3) Embedded pedagogy: universal design in township classrooms. Teachers acknowledged several challenges that they face and these were subtly and complexly connected to the social, historical, racial, and economic context of South African township. The first key finding illustrates the scope of the challenges faced by teachers in township special needs schools. In the second key finding, I describe teachers' beliefs about inclusion and the relationship between these beliefs and their everyday practice in a segregated teaching environment. Lastly, the third finding explains the embedded pedagogy that township special education teachers use, which aligns to varying degrees with UDL philosophy and instruction.

Challenges facing teachers in township special needs schools

Upon completing the workshops, teachers agreed that the main philosophy of UDL is highly beneficial for students. However, many teachers still did not view implementing UDL principles in the curriculum as feasible because of insufficient resources, space, and assistive devices in the current educational structure. Results of this study illustrate barriers which prevent teachers from developing a flexible curriculum and implementing new strategies such as UDL in their teaching. These barriers stem from the unique circumstances of townships in which teachers and students are situated.

The principal of Career School, Susan (pseudonym), shared that a lack of school funding has been a continuous challenge in maintaining schooling. The school has been using several temporary trailer buildings for years, despite consistently petitioning for new school buildings to the local government since 2013. The neighborhood where the school is located is known as one of the most dangerous areas in town. Susan explained that because of a lack of monetary support from the local government, she conducts an annual fund-raising trip to England, which has been a major source of funding for the school. Seeking funding has become not only a time-consuming responsibility for the principal of Career School, but also a persistent challenge to remove both physical and instructional barriers to learning at Career and Harmony schools.

For example, teachers at Harmony school have been unable to secure funding to address the inaccessibility of their school building. One teacher at Harmony School shared that one of her

students who uses a wheelchair, is often isolated or excluded from activities. During my visits to the school, I witnessed that there was only one accessible entrance in one of the buildings in Harmony School. Unfortunately, the building that this student spent most of her school days in, did not have an accessible entrance. In Career School, hardly any buildings were wheelchair accessible. A lack of sustainable educational support for students with disabilities has been an ongoing challenge in South Africa. Wildeman and Nomdo (2007) assert that insufficient funding, lack of national clear guidelines and standards for implementing inclusive education, and lack of implementation capacity make the current situation a systemic challenge in South Africa. Inaccessibility at the township special schools in this study serve as an example of barriers that disable students, and are the result of systemic inequalities, rather than individual limitations (Shakespeare, 2013).

Beyond the financial limitations of the school, Susan discussed some of the challenges that face the students and the larger community and how she understands the role of Career School:

Many of our students live in a shelter in town. Many kids don't receive family support. Several students have drug problems and they can be easily upset and physically violent. Because they don't get much family care and kicked out from the mainstream schools, we have to support them to be more independent. I have to help them make themselves living after school. That is why we so much focus on students' vocational education. I want them to finish the school and have a job after school.

Susan laid out the trajectory of students, illustrating how challenges of students' home and community life influence how she understands the role of her school. Moving towards independence and financial stability is a central goal for Career School. This is reflected throughout the curriculum of the school. As opposed to mainstream schools, which focus on academic achievement, Career School emphasizes vocational education. Considering the high unemployment rate and poverty in townships (Bhorat, 2007; World Bank, 2015), Career School's focusing on vocational education may be a more practical reaction to current conditions that many students face in townships.

Another challenge that teachers encounter in township special schools is a lack of transition plans for students from school to community after graduation. Even though Harmony School was established to serve students up through to high school level (typically up to age 18), there were several students who still attended school after their graduation. One of the teachers in Harmony School discussed how a lack of plan for students after high-school causes several students to continue attending school past the typical school age:

Actually, there is no place to go after graduation because of their disability. They can't have a job. If their family don't take care of them, it's hard to live.

Without a plan for transition for students with disabilities who graduate from the Harmony

School, the school takes up the responsibilities for providing a place in the community for students. This expanded role creates extra responsibilities for teachers in township special needs schools.

One of the most common challenges that teachers discussed was dealing with students' 'learning gap' resulting from an interrupted formal education. Even if students are in the same grade or class, each student demonstrates significantly different familiarity with the curriculum because of frequent and long-term absences from formal education. Among students who show regular attendance, short-term absences are quite common at Career School. These absences often come from an unstable living situation in students' households or a lack of family support. Several teachers explained how irregular attendance leads to challenges for them to prepare an appropriate curriculum for each student.

The effects of physical and psychological abuse upon students was also identified as another challenge for teachers, impacting the attention and time they could devote to classroom teaching. In Career School, several students experienced physical and psychological abuses, which caused a great deal of challenges for teachers and other peers in the classroom. Due to unstable household living situations, many students are at risk of sexual, drug, or alcohol abuse in the area where the Career School is located. One of the teachers shared her thoughts about the difficulty of teaching students because of behavioral issues:

We have students with extrinsic barriers in our school. Because of their socioeconomic issues, they find it so difficult to cope with the school work. They are emotionally broken, fragile, and have drug addiction due to their socioeconomic issues and poverty...because of that, students' concentration span is too short and they lack interest in learning.

Students' unaddressed mental health needs are often demonstrated through challenging behaviors. Through pre-workshop questionnaires, more than half of the teachers revealed that challenging behaviors often cause problems in and outside the classroom. Such behaviors often result in disruptions in class or aggressive physical interactions between students.

As a means to address the challenging social conditions in which their students live, teachers are forced to play a multi-faceted role in the lives of students in township special needs schools. For example, teachers often play the role not only of teacher but also of parent, social worker, guardian, and sometimes therapist. One teacher who has been working at Career School for more than 10 years explained how she is often required to go beyond what teachers typically do in other schools. She described her job as that of a teacher and social worker:

Every Friday, our school gives students a bag of food like bread and milk because they don't have food at home. With this food, students can get fed during the weekends. I know there are some students whose family rely on this food also. There are many students who come to school with no food. We also do home visits to students' houses because many students just don't show up to school without a notice.

During home visits, teachers witnessed students' home environments and family dynamics. They have frequently noticed that one or more parents experience long-term unemployment or alcohol addiction. Home circumstances make it difficult for parents to prioritize their children schooling, leading teachers to take on a multi-faceted role in the hope of bringing a level of stability to their students' lives.

Other factors that were cited as challenges to implementing UDL practices in teaching. These included a lack of human resources and professional development opportunities. In order to implement new teaching strategies, it is imperative for teachers to be introduced to new teaching practices and philosophies (Borko, 2004). Through the group interview, teachers reported that in-service teacher training programs were extremely limited in both schools. Several teachers, especially in Career School, shared that my UDL workshops were the first and only in-service teacher education program that was provided since they started working in the school. Furthermore, only a few teachers in both special needs schools have a special education background or teaching credential. It seems that the required teaching credentials for teachers at each school were not very strict. Without exposure to an array of instructional strategies, it was difficult for teachers to develop an inclusive pedagogy and implement it in their teaching.

Teachers' understanding about inclusive education and segregated schooling system

During the workshops, many teachers voiced their support for inclusive education and many of them enthusiastically agreed with the principles of UDL and goals of inclusive education. They further expressed a great deal of dissatisfaction with teaching in a segregated school for students with disabilities. For example, when asked about the experiences of teaching in a special school setting, several teachers articulated a low level of job satisfaction. One teacher at Harmony School explained that she felt discouraged when teaching students with intellectual disabilities because the outcome of teaching these students is less visible than that of teaching their non-disabled peers in mainstream schools:

Although they (students) are in the same class, they are in different levels of understanding. They need to do same thing over and over until they understand. Even so, the next day, they might not know what they seemed to understand the previous day. This makes me feel very discouraged as a teacher sometimes.

In addition to feeling discouraged about a perceived lack of academic progress, another teacher shared his frustration about the monotony of his teaching, such as when teaching students how to write their name for several weeks. This sometimes made him question the meaning of his profession.

Additionally, teachers in Career School shared their feelings of emotional exhaustion from discouragement about their students' academic and behavioral characteristics. At Career School, teachers reported that students with unaddressed emotional needs were involved in aggressive physical incidents more frequently than those in mainstream schools. These incidents sometimes led students to be involved in legal issues, meaning that students could not continue their schooling. These schooling environments required teachers to face increased responsibilities and stress in their efforts to support their students.

Several teachers indicated how teaching in such an environment made it difficult for them to maintain high expectations for their students. They expressed how they could not utilize instructional strategies that would challenge their students. Through the pre-workshop questionnaires, teachers cited repetition as one of the most commonly used teaching strategies at Harmony School. Many teachers agreed that repetitive teaching strategies are important for their students with intellectual disabilities. When introduced to strategies of challenging students' cognitive thinking skills during the workshop, a few teachers showed their skepticism about using the strategies for their students who come to school without remembering what they had learned the previous day. Low expectations of students' learning capability seemed to contribute to teachers questioning the applicability of some of the inclusive teaching strategies.

Despite citing many challenges of working in a segregated school, many of these same teachers also expressed that they believe that maintaining a separate school setting for students with disabilities is necessary. In the pre- and post-questionnaires, teachers indicated that students with disabilities needed instruction that was specialized and separate from their non-disabled peers. For example, multiple teachers in Harmony School mentioned that students with disabilities require special services and accommodations such as therapy or assistive devices that are different from 'normal' children in mainstream schools. In Career School, students' short attention span, emotional and behavioral issues, and large learning gaps were listed by teachers as the rationale for specialized instruction in a separate setting.

Other reasons why teachers justified the need for separate special needs schools were more practical. Both schools receive rehabilitation services from either local NGOs or a local university, which they deemed could be more conveniently provided at a special school. Additionally, teachers at Career School indicated that if it were not for their school, there would be no educational services provided to students since most of them are already pushed out from mainstream education in their community. In other words, these teachers saw special schools as a reality in the effort of educate a population of students from marginalized backgrounds who lack traditional schooling opportunities.

Teachers' assessment of the role of their schools is consistent with research on the current conditions of inclusive education in South Africa. Pillay and Terlizi (2009) assert that a lack

of needed resources to support the different needs of students in mainstream schools pushes students with disabilities into special needs schools in South Africa. Negative attitudes towards students with disabilities in mainstream schools also make it difficult for students to remain in mainstream schools (Bothma, Gravett and Swart, 2000). Although the South African government has increased its efforts to create inclusive educational environments for all students (Department of Education 2001), the current climate is one in which many educators believe that a separate school system for students with disabilities is a necessity. It appears that multiple factors— limited resources, unstable home lives, and a lack of support for both students and teachers— contribute to how teachers perceive students with disabilities as well as inclusive education in both special needs schools.

Embedded pedagogy: universal design in township classrooms

Interestingly, while teachers cited many challenges of implementing UDL, it was evident that practices consistent with principles of UDL were already practiced in the special needs schools in this study. Although none of the 15 participants identified as being aware of the term 'Universal Design for Learning' or its principles in the pre-workshop questionnaires, several teachers offered specific and concrete examples of pedagogical decisions that demonstrate aspects of UDL philosophy. I grouped those strategies based on which UDL principle most closely aligns with each instructional method (Table 2). The purpose of this table is not to compare or contrast each strategy with each UDL principle, but to help visualize the strategies in the given setting. Among the strategies provided by the teachers, I only listed each strategy once, though several were shared by multiple teachers.

Table 2

UDL principles	Examples from the teacher participants		
Principle I: Provide Multiple Means of Engagement the "why" of learning	 Ability grouping and giving more time for tasks One-on-one support, guidance. Providing more materials Emotional support Give him/her full attention and listen to a problem that causes an unusual behavior Make sure that students' work is graded according to each one's level of understanding. Extra classes, homework, supports from outside experts for students' rehabilitation. 		

Principle II: Provide Multiple Means of Representation the "what" of learning	 I do pre-writing activities, threading, and teaching cutting to help learners' motor skill. Use teaching aids, give individual attention. Give lots of examples before allowing or expecting them to do on their own. Employing the use of real and tangible examples I make sure that students understand me and explain difficult English term in their vocabulary. I also try to bring concrete examples to class to explain difficult concepts. Put visually impaired students in front of class, print big letters on worksheet
Principle III: Provide Multiple Means of Action and Expression the "how" of learning	 Inclusion of music and art in all (or as many as possible) areas and aspects of any subject of the curriculum I had students play with dough to help them strengthen their fine motor skill, Squash up paper with one hand to strengthen muscles in hand. Let students climb up a ladder and down a net to work on their motor skill
Other inclusive strategies	 ADHD: Don't have too much on walls, not wear colorful clothes or lots of jewelry etc. Have students keep occupied with series of works, send on errands Hearing impaired: stand close to learner. Speak clearly, always face class Wheelchair users: make them feel included in activities. Using outside rehabilitation program (drug lessons, religious lesson) For deaf learners, I make sure that I am facing them and they can read my lips while talking or talk close to them, loud, for those who are partially deaf. Repeat content and activities

Many of the above practices are in line with the intent of UDL- providing multiple means of representation and engagement, to allow access to learning for as many learners as possible (CAST, 2011). For example, strategies for students with visual or hearing impairment show how teachers try to maximize the benefit of utilizing the classroom environment by providing 'large printed letters on worksheet'—multiple means of representation (UDL principle II). Another strategy that is consistent with UDL principle is 'not displaying too much visual stimulation in a classroom.' Although this strategy is aimed to support young learners diagnosed with ADHD or those who tend to be easily distracted, it is likely to benefit all learners. Other teachers reported using arts and music in their teaching as a means of engaging students in multiple actions and expressions (UDL principle III).

It is discernible that teachers' pedagogical decisions are embedded with strategies to support

students with disabilities by providing accommodations or equipment that often require minimal expenses. Moreover, it is evident that there is consideration on the part of many teachers for developing classroom environments that support all students, regardless of their disability label. Perhaps teachers may not use the term 'Universally designed pedagogy' to describe their teaching practice and strategies. Yet, as experts with knowledge of their local teaching context, teachers illustrate their desire to alter practice to embrace diversity, despite the challenges of their environment.

Discussion and Conclusion

In this paper I have examined current challenges of developing inclusive education as well as the potential applicability of implementing UDL principles in two township special needs schools in South Africa. The findings of this study illuminate how the applicability of UDL principles is revealed through an understanding of the local educational and community context. Although many teachers agreed that implementing UDL principles would be beneficial for their practice, the current conditions in South African township schools makes teachers doubt the feasibility of implementing this 'Western concept' in their classrooms; they lack the resources to support the diverse learning needs and emotional well-being of their students. At the same time, the examples that teachers provided illustrate how in serving students in schools with few resources, they still employ practices that are consistent with UDL philosophy and attempt to cater to the needs of diverse learners.

A central theme in the findings of this study is how historical, social, and economic circumstances of South African townships shape both the meaning and experience of disability in schools. The historical trajectory of inequalities in South Africa have not only generated a large disparity in wealth distribution between racially privileged and oppressed groups, but it has also created an imbalance in the development of infrastructures and social and educational services (Jansen, 2009). As a result, the current educational system is not adequately serving the majority of South African students from historically oppressed groups (Eloff and Kgwete, 2007; Wildeman and Nomdo, 2007). In turn, special needs schools in townships often serve students who need more support than those in affluent schools, but who have much fewer resources (Spaull, 2013). These findings provide a glimpse into the intersection of disability and the material consequences of a long history of apartheid in South Africa.

In some cases, students' marginalized backgrounds and unstable living conditions position them well in earning disability labels in schools (e.g. emotional disability, learning disability). The relationship between students' marginalized backgrounds and disability was evident in the use of labels such as Emotional Behavioral Disorder (EBD) or learning disability in Career School particularly. The fact that these inequalities have persisted in an era where inclusive education has been championed globally leads one to the unfortunate conclusion

that 'inclusive education' is an ideal that has only reached fruition for those with racial and socioeconomic capital. Such conditions that are more relevant in the global South have often been ignored or depicted as irrelevant in the broader discussion on inclusion (Grech and Soldatic, 2015).

As in South African township schools, many students with unstable home lives in the United States are often determined to embody disability when they exhibit distressed behaviors in schools (Danforth, 2005). This interpretation of their behavior leads them to being pushed out of mainstream schools/classrooms and into special schools/classrooms such as those in this study. The use of these labels draws attention away from the marginalization that the students experience in the first place, and frames the problem as an individual rather than a societal issue (Harwood, 2006). Through pathologizing students, disability becomes an embodiment of economic realities in a community that has a history of systemic inequality (Grech, 2009; Meekosha, 2011).

The tendency for students from marginalized backgrounds to be positioned as ones embodying disability through invented labels is not unique to South Africa. In the US special education system, disability labels that students are attributed are highly related to their racial identity as well as socioeconomic status (O'Connor and Fernandez, 2006). A significantly higher number of minoritized students from low-socioeconomic status have been diagnosed with 'soft disabilities' (i.e. the most subjective) and are more frequently removed from regular classrooms than their affluent white peers (Harry and Klingner, 2014). As in South Africa, race, dis/ability, and socioeconomic status have been functioning as a means of intersectional oppression towards many students from marginalized backgrounds in special education classrooms in the United States (Skiba et al., 2008). In both instances, marginalized identities give meaning to the very ontology of disability, as well as how students experience their schooling.

At the same time, the findings of this study point to what is unique about the South African context and highlight the need for more localized understanding of inclusive education. This understanding must grounded in knowledge of how teachers in the global South develop and modify practices to meet students' needs. In this case, localized knowledge brings forth the challenges that students with disabilities in South African township schools face. Socioeconomic instability is common in global South contexts and are products of global systems such as colonialism, capitalism, and neoliberalism (Connell, 2011; Erevelles, 2011; Grech, 2011). Without considering the material consequences of global economic and political conflicts, the unique meaning of disability and inclusion cannot possibly be understood in the global South, and more likely, in any context (Grech, 2014). Therefore, this study points to the need for international discourse around disability and inclusive education to consider the voices from outside of those who access global power, in order to bring greater meaning to disability and to the limits and possibilities of implementing inclusive education.

I conclude my paper by juxtaposing Grech's (2014) critique on imported inclusive education discourse in rural Guatemala and the comments by the teachers from Career School:

In the absence of investment in resources and training of staff in mainstream facilities, special schools may indeed remain the only option, and may need to be stepped up, when this may be the only form of quality education possible, at least until mainstream schools can really accommodate them (146).

To my question about whether teachers believe separate school settings are necessary for their students with disability labels, the teachers answered:

If we don't have our students here, there will be no place to go for our students.

The focus of inquiry into disability must continue to evolve, to consider what pushes students out from the mainstream educational system to begin with, and to what degree historic and systemic oppressions have been considered in international discourse around implementing inclusive education in the global South.

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Notes:

- 1. UDL is defined as a 'framework that addresses the primary barrier to fostering expert learners within instructional environments: inflexible, "one-size-fits-all" curricula' (CAST, 2011:4).
- 2. The three principles of UDL include providing multiple means of 1) engagement; 2) representation; and 3) action and expression (CAST, 2011).
- 3. I use the term 'special needs school' throughout the paper to refer to schools for students with disabilities. This is the widely accepted term used to refer to such schools in the region where this research study was conducted.
- 4. The terminologies used in this paper to refer to disability categories, the school system, and special education in South Africa, are based on National Education White Paper 6 (2001) and Census (2011): Profile of persons with disabilities in South Africa (Stats SA, 2014).
- 5. Among eleven official languages, Xhosa is the second most widely used language in South Africa (Gordon et al., 2005). Public education is taught in one of the regional official languages until grade three, and then changes to English in 4th grade. Therefore, it is

common that most people with high-school degrees are fluent in English as well as their mother tongue. Teacher workshops and other data collection were conducted in English.

6. In order to provide the most genuine voices from teachers, expressions and terminologies in the findings section are based on the raw interview and questionnaire data.

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